ELLEN MACARTHUR FOUNDATION

The Jeans Redesign
Insights from the first two years

2019-2021

Jeans are **iconic**.

But the way we make jeans today causes **waste and pollution**.

The Jeans Redesign aims to demonstrate that **it can be different**,

by making jeans fit for **a circular economy**.

Why jeans need a redesign

The current fashion system is broken. We use resources to make products that are worn very little and, ultimately, thrown away. As a result, every year the fashion industry misses out on hundreds of billions of dollars and contributes significantly to waste and pollution. The fashion industry is responsible for more annual greenhouse gas emissions than all international flights and maritime shipping combined.[1] It is also a significant contributor to biodiversity loss due to soil degradation and waterway pollution caused by raw material production methods and intensive washing and dyeing processes.

In recent years, many businesses across the fashion industry have started to take action to address environmental issues by, for example, reducing carbon emissions and water use. These efforts are essential. However, to create a thriving, nature-positive fashion industry, a radical transformation of the way products are designed, made, and used is required. For that, **we need a circular economy**.

The circular economy is a bigger idea than incrementally reducing the harm of our current model. By design, it helps tackle the root causes of global challenges such as climate change, biodiversity loss, waste, and pollution, while creating opportunities for growth that benefit businesses, people, and the environment alike.[2] In a **circular economy for fashion**, products are used more, are made to be made again, and are made from safe and recycled or renewable inputs.

Transforming the fashion system so fundamentally is a challenge, yet presents an exciting opportunity. It means not only designing the products of the future, but also the processes, services, supply chains, and business models that will deliver them. **But where to begin?** By taking an iconic product: **jeans**.

For decades, jeans have been at the heart of countless fashion collections. However, they are no exception to the fashion industry's take-make-waste approach. Making jeans today requires large amounts of resources, such as pesticides, water, and energy, and the way they are designed and constructed makes jeans difficult to remake and recycle after use.

Redesigning jeans is a starting point on the journey towards a circular economy for fashion.

About The Jeans Redesign

The Jeans Redesign aims to demonstrate how a garment can be designed and made for a circular economy. Participants have aligned behind a set of common guidelines and definitions and, in making them a reality, have identified solutions, opportunities to overcome barriers, and innovation gaps to scaling. Building on what has been learnt and growing momentum to transform the fashion industry, now is the time for the industry to take bold action, supported by policy development, towards the common vision of a circular economy for fashion.

In February 2019, the Ellen MacArthur Foundation gathered insights from more than 80 industry experts from across academia, brands, retailers, manufacturing, collectors, sorters, and NGOs to collaboratively define design parameters to make jeans fit for a circular economy. The Jeans Redesign is part of the Foundation's Make Fashion Circular initiative, launched in 2018, which aims to catalyse action towards a circular economy for fashion, where products are used more, are made to be made again and are made from safe, recycled or renewable materials.

The Jeans Redesign builds on existing efforts by industry players – including C&A and Fashion For Good's open-source guide Developing Cradle to Cradle Certified™ Jeans[3] – and the findings of the Foundation's 2017 report **A new textiles economy: redesigning fashion's future** to provide **a set of guidelines with common definitions for The Jeans Redesign.** The guidelines define a starting point for industry to design and make products in accordance with the principles of a circular economy to ensure durability, material health, recyclability, and traceability, and lay out the detailed requirements that must be achieved. The guidelines are a 'minimum bar', established with the intention to be regularly reviewed and updated to ensure The Jeans Redesign continues to drive the industry forward.

In the two years since the guidelines were created, **more than 70 organisations, including brands, retailers, garment manufacturers, and fabric mills** have committed to and taken action to make fabric and jeans in line with these guidelines. Organisations have increased their understanding of what is possible today, explored innovative solutions, and identified clear barriers and innovation gaps to overcome. These insights can now be used by businesses and policymakers to take action towards a circular economy for all jeans and other products.

> **"The aim of The Jeans Redesign is to support organisations in the fashion industry to move beyond theoretical discussions of what is needed to create a circular economy, to build confidence to explore and learn by doing, and to test the application of circular economy principles, bringing them to life by putting real products on the market. We're pleased to see the solutions identified by participants as a result and the development of a greater collective understanding of the challenges that must be addressed as a priority. It is now clearer where investment and innovation is needed to support design for a circular economy. Now the concept has been proven, there's no reason to delay progress. We call on industry and government to take concerted action to address barriers and build on this growing momentum to rapidly transition to a circular economy for fashion at scale."**
>
> **Laura Balmond**,
> Lead – Make Fashion Circular,
> Ellen MacArthur Foundation

Meet the participants

The Jeans Redesign brings together 72 organisations from across the global fashion value chain including

31 brands and retailers
26 garment manufacturers
21 fabric mills
9 laundries*

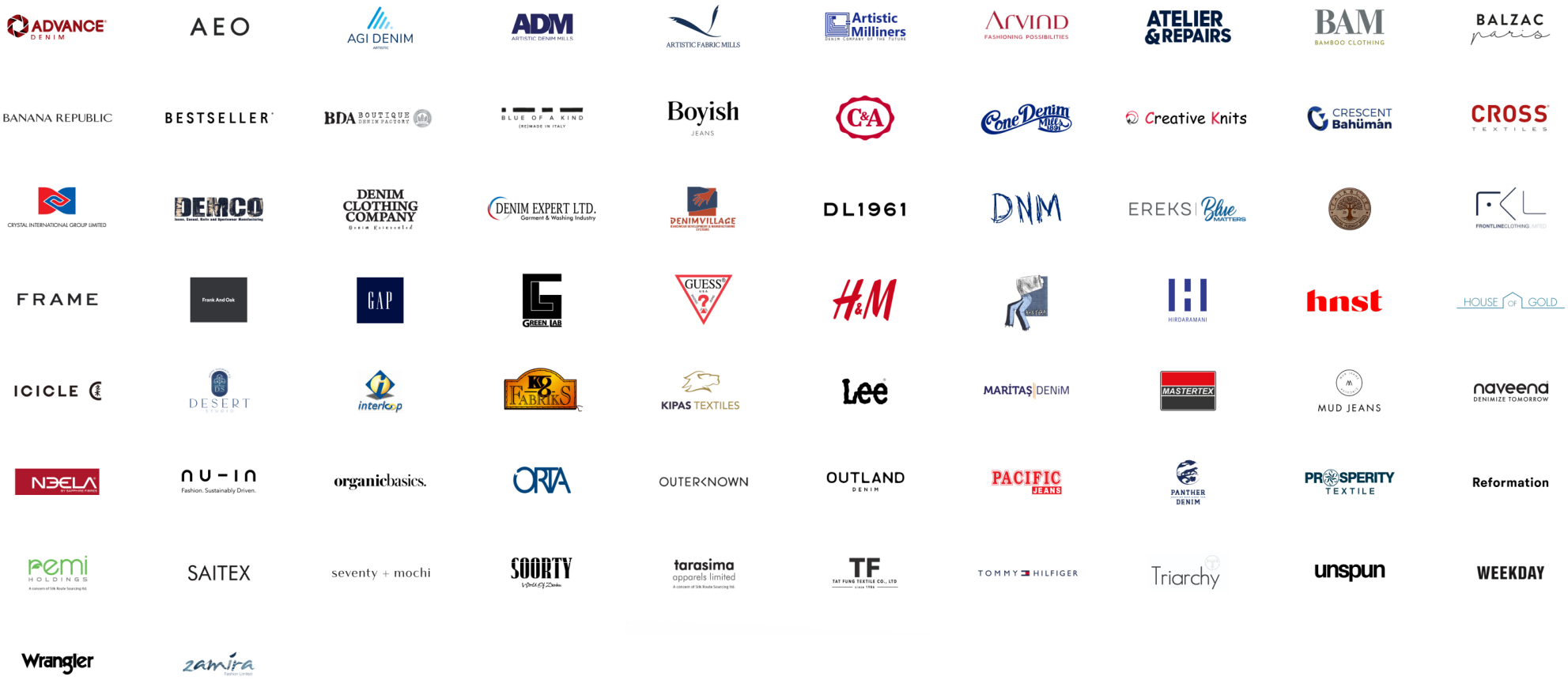
* Note: the total number is greater than 72 as organisations can operate in more than one sector of the value chain. For example, some vertically integrated organisations operate both as a garment manufacturer and a fabric mill.

Participants operate in more than 20 countries in Africa, Asia, Europe, North America, South America, and Oceania.

These organisations committed to create fabric and jeans in line with minimum guideline requirements by the 31st May 2021.

Over the last two years, they have identified actions needed and have begun to apply this in their businesses.

The Jeans Redesign participants May 2021



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Summary of outcomes

1 Participants of The Jeans Redesign have demonstrated it is possible to make jeans fit for a circular economy today

80% of participants in The Jeans Redesign have made fabric or jeans that comply with the guidelines and common definitions, resulting in brands putting **half a million pairs of jeans on the market that are durable, traceable, recyclable, and made using safe materials and processes.** This has been achieved through collaboration, both across the value chain and within organisations, building knowledge and capacity. Investments of USD 14.5 million have been made to create fabric and jeans in line with The Jeans Redesign guidelines. **While the number of redesigned jeans remains a fraction of the industry total, The Jeans Redesign demonstrates that it is possible to create garments fit for a circular economy today.**

Some brands are also piloting new models through which products can be accessed – for example, MUD Jeans is offering rental – and others are exploring new production processes, such as unspun's 'made-to-order' model. For a number of participants in The Jeans Redesign, taking actions within businesses and across value chains to create jeans fit for a circular economy has ignited discussions around developing other products in line with circular design principles, with participants investigating solutions for garments including chinos, jackets, t-shirts, and accessories. **These actions highlight how insights from The Jeans Redesign can be used to design products for a circular economy across the fashion industry.**

2 Through collective action, participants have identified solutions, remaining barriers, and innovation gaps to scale a circular economy for all jeans and other garments

In the first two years of The Jeans Redesign', participants have demonstrated it is possible to meet the majority of criteria to make jeans fit for a circular economy. Commonly applied solutions include the use of organic cotton and substitution of rivets with bar tacks, reinforced stitching, or embroidery techniques to make recycling easier. For some of the criteria, more alignment on industry best practices is required. For example, whilst participants met the criteria to ensure 'jeans are able to withstand a minimum of 30 home laundries', the type and number of durability tests conducted after washing differed between participants. Another group of criteria required solutions that, while available, currently only offer limited style choices or are costly, for example disassemblable buttons and post-consumer recycled content.

Some criteria have been consistently reported as being amongst the toughest requirements for participants to meet. This includes identifying and sourcing cellulose-based fibres that are produced in ways that have nature-positive outcomes,[4] hardware solutions that successfully prohibit conventional electroplating a technique that generates hazardous waste, zippers that can be removed and reused or recycled without losing fabric during disassembly, and limiting non-cellulose based fibres to 2% to ensure recyclability, while still delivering styles and comfort that appeals to customers (including jeans with stretch).

See Section 2 of Detailed insights from The Jeans Redesign for further details.

3 Building on insights from The Jeans Redesign, businesses and policymakers must take bold action to create a circular economy for all jeans and other products

Insights from The Jeans Redesign provide a clear picture of the current landscape of solutions, barriers, and innovation gaps. These insights can now be used by businesses to take action, supported by policy development designed to scale a circular economy for fashion. **No one organisation can overcome these barriers alone. Businesses and policymakers will need to make concerted efforts to build on the early momentum of The Jeans Redesign.**

The Jeans Redesign has provided a starting point for businesses to align on common criteria and explore the feasibility of creating a circular economy for fashion by focusing on the redesign of an iconic product. The success of participants has highlighted what is achievable but it has become equally clear that there are industry-wide barriers to creating a circular economy for jeans and other fashion products.

Call to action

To continue driving the industry forward, the Ellen MacArthur Foundation calls on:

1. **All businesses in the fashion industry to take bold action to adopt circular economy principles today.** The Jeans Redesign guidelines can provide an entry point to work from, with the Ellen MacArthur Foundation's vision of a circular economy for fashion providing a target state to aim towards.[5] For the participants in The Jeans Redesign taking bold action means applying the guidelines across a greater proportion of their denim collections and beyond to all garments. All businesses are encouraged to continuously assess their progress towards a circular economy and increase their ambitions accordingly over time.

2. **All businesses – including collectors, sorters, and recyclers – to collaborate and innovate to overcome barriers to a circular economy for fashion.** This requires innovation at the design stage, for example, developing zippers that can be removed without losing fabric during disassembly and then reused or recycled in practice, or fabrics with stretch that can be easily recycled. As well as at a system level, business models and take-back schemes are crucial to keep products in use, and infrastructure development is imperative to ensure products and materials are circulated in practice.

3. **All businesses and policymakers to align on definitions of and parameters for regenerative production and sourcing, and put in place enabling mechanisms to support the production of materials that have nature-positive outcomes.** Businesses should signal demand and make commitments to use fibres grown using production practices with regenerative outcomes. Policymakers should support by mobilising public and private capital to increase regenerative production capacity, and develop policies that set the direction of travel and provide incentives for businesses.

4. **Policymakers to create the enabling conditions for the circular economy to emerge at scale in the fashion industry, building on a set of common policy goals.**[6] Policies can be developed to support products and materials staying in use for as long as possible, for example, through the creation of minimum design requirements, incentivisation of new business models, and support for innovation, infrastructure, and skills development. Standards and incentives can also be developed to provide businesses with direction and incentives to use not only safer but safe inputs and processes.

Now is the time to take action on all garments toward a circular economy for fashion.

See Section 3 of Detailed insights from The Jeans Redesign for further details.

Detailed insights from The Jeans Redesign

1 Participants of The Jeans Redesign have demonstrated it is possible to make jeans fit for a circular economy today

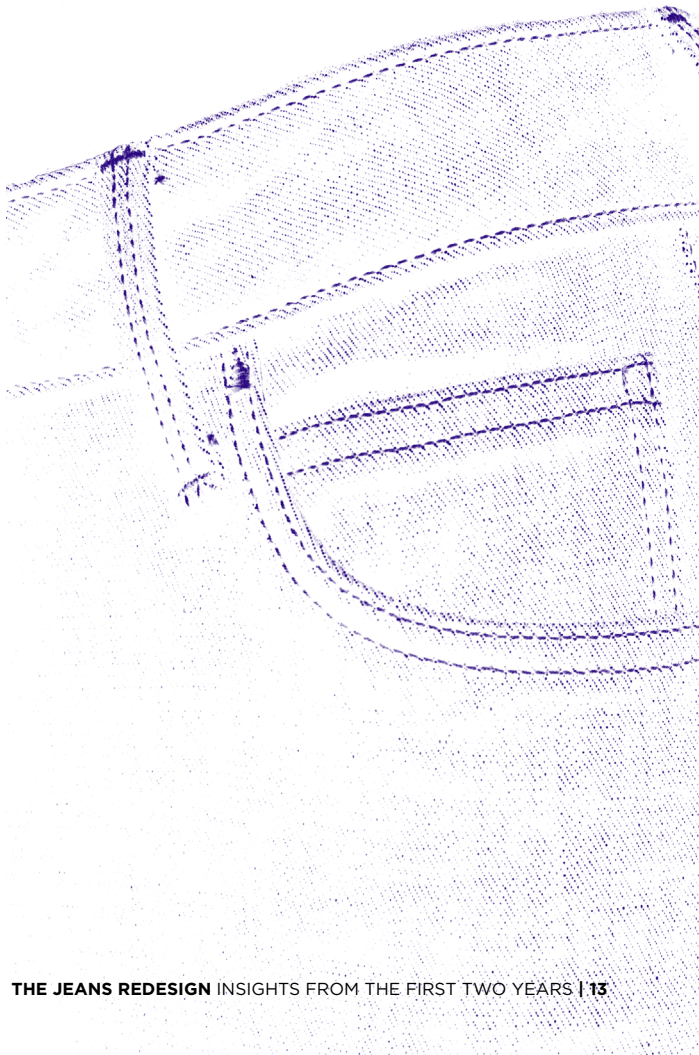
80% of participants* in The Jeans Redesign made products that complied with The Jeans Redesign guidelines and common definitions,[8] resulting in brands putting more than half a million pairs of jeans on the market that are durable, recyclable, traceable, and made using safe materials and processes. While the number of redesigned jeans remains a fraction of the industry total, The Jeans Redesign is a demonstration that it is possible to create garments fit for a circular economy today.

Despite the disruptions caused by the **Covid-19** pandemic, by the 31st May 2021 87% of the brands had put more than half a million pairs of redesigned jeans on the market. A third of these brands reported that they now have a jeans portfolio that is 95-100% aligned with The Jeans Redesign guidelines. The organisations that have achieved the highest percentage of products compliant with The Jeans Redesign guidelines are small and medium organisations.

Garment manufacturers and fabric mills have worked on innovative solutions and are ready to supply participants of The Jeans Redesign and other brands and retailers. This presents an opportunity to scale production of jeans fit for a circular economy by leveraging new capacity.

More than three-quarters of garment manufacturers and fabric mills in the project have brought fabric or jeans compliant with The Jeans Redesign guidelines to the market. Of the remaining garment manufacturers and fabric mills, 78% have reported that they are ready to produce fabric or jeans compliant with the guidelines, some of which have reported they are in discussion with buyers to start producing orders.

* This is a summary of insights from the individual participant reports. For the full details, see the individual participant reports in the Appendix.



Across the participant group, some businesses have shown high levels of ambition, while others have been more conservative in their approach to redesigning jeans. Of those that have been able to bring fabric or jeans compliant with the guidelines to market, many have gone beyond the guidelines to collaborate with other businesses, innovate for new technologies, and invest in knowledge, capacity, fixed assets, inventory, and procurement. USD 14.5 million has been invested by 15% of participants[9] and with many participants yet to submit investment data, total investments are likely to be substantially higher. Some brands are also piloting new models through which products can be accessed – for example, MUD Jeans is offering rental, – and others are exploring new production processes, such as unspun's 'made-to-order' model.

In the group that have not yet brought compliant jeans or fabric to the market (by May 2021), several have taken actions to establish processes that will enable them to produce collections in the near future, including some organisations that are currently applying the guidelines to their entire jeans portfolio at the same time.

A few participants are currently unable to meet the criteria. They have reported a number of challenges including manufacturing delays due to Covid-19 and setbacks due to challenges around organisational change needed to redesign garments.

"**MUD Jeans has been offering customers the option to rent their jeans instead of buying since 2012. With our 'Lease a Jeans' model, our customers have the freedom of experiencing a new pair of jeans without the environmental anxiety of a new purchase. Our leasers borrow our jeans and return them once they are done using them. The returned jeans are reviewed, and based on their conditions, they can be reused, or recycled into a new pair of jeans. We hope that others will follow our example and we are thrilled to see more and more companies working towards a circular economy for fashion with the support of The Jeans Redesign guidelines. Let's turn this walk into a march and make circular fashion the future!**"

Laura Vicaria, CSR Manager, **MUD Jeans**

"**Through our solution, we eliminate the need for inventory. We throw traditional sizing out the door, and make jeans on-demand with customers using their phones to take body scans. The Jeans Redesign garments were created via our on-demand technology, created in collaboration with many other forward-thinking partners. We would like our physical products to be circular, traceable and intentional.**"

Walden Lam, cofounder & CEO, **unspun**

1 Participants of The Jeans Redesign have demonstrated it is possible to make jeans fit for a circular economy today

Collaboration, both across the value chain and within organisations, alongside building internal knowledge and capacity, has been crucial for success.

CROSS VALUE CHAIN COLLABORATION

In a number of cases, participants have reported that solutions to make jeans fit for a circular economy are limited (for example, buttons that can be disassembled and cellulosic thread) or simply do not yet exist. This has spurred them into conversation with their suppliers to find solutions that meet the guidelines. Participating brands reported working with garment manufacturers and fabric mills that are part of The Jeans Redesign as well as those that are not, demonstrating appetite in the industry at large to work collaboratively to design and supply innovative solutions.

> **"The Jeans Redesign has provided a platform for us to collaborate with organisations from across the value chain and raise the ambition level together. For us, the focus has been on developing ways to increase the recycled content and bring brands on the journey with us. Being part of an industry that has a significant impact on climate change, biodiversity loss, waste, and pollution, we have the opportunity to become part of the solution. Kipaş is honoured to participate in The Jeans Redesign project led by the Ellen MacArthur Foundation and contribute to a circular economy for fashion."**
>
> Halit Gümüşer, Managing Director and Board Member, **Kipaş Textiles**

> **"Since joining The Jeans Redesign, we have brought new participants into the project and encouraged them to start working towards a circular economy for fashion. Working together has allowed us to expand our knowledge of circular design and take inspiration from each other's ideas and processes. We have worked collaboratively on trim design, washing innovation, and new designs that we are proud to present as part of our Jeans Redesign journey. Together, as brands and manufacturers, we can make and deliver circular jeans to users. We consider it a major achievement to show that a circular economy can be achieved through design!"**
>
> Joaquin Sandoval, Quality assurance, Sustainability and CSR responsible, **Blue Design America**

> **"Working with The Jeans Redesign guidelines has accelerated many of our organisation initiatives towards a more circular future. Since joining the project, the dialogue with our brand and retail clients has opened up and become more specific and collaborative. It was, and is, meant to inspire a holistic change in how they approach the design process, from the selection of material and execution of finishing, to the offering of better supply chain solutions to ensure products are fit for a circular economy. The Jeans Redesign has created a meaningful outline and a community that's free of the protectionist behaviours that control our industry. We can be proud to share our results and solutions with our peers, and even our competitors."**
>
> Roel Vossen, CEO and Founder, **Frontline Clothing Ltd.**

BREAKING DOWN TRADITIONAL ORGANISATIONAL SILOS

Participants have reported that producing jeans in line with The Jeans Redesign guidelines has required working across internal teams, exchanging solutions, challenging those involved to think differently, and bridging conventional organisational silos.

“**Sometimes we failed, and sometimes we managed to overcome big barriers and reach success. The Jeans Redesign taught us to tackle the challenges that we have in today’s denim industry and not give up at the first obstacle. From initial designs and accessories to fabric cutting, sewing, and washing stages, everything must be in harmony in order to meet the project guidelines. By having that end goal in mind, all of our departments have shared a common understanding and worked collaboratively to create products suitable for our circular journey.**”

Kaan Şen, Business Development & Circularity Manager, **Ereks-Blue Matters**

“**The denim industry is embarking on a pivotal phase in our circularity journey. Creative thinking, cross collaboration and partnership with key stakeholders in our supply chain are key to unlocking the technical challenges that will allow us to scale for success and maximum impact. We’ll continue to carry on this momentum, testing, failing, learning and moving forward, all with the goal of working towards a more circular fashion industry.**”

Nicolas Prophte, VP, COE, **Denim**, **Tommy Hilfiger**

INTERNAL KNOWLEDGE AND CAPACITY BUILDING

Participants have reported benefits of building internal circular economy knowledge that is relevant beyond The Jeans Redesign, for example, providing training to existing employees, hiring staff with specialised skills, and engaging external consultants.

“**In order to reach our climate positive goal, we must transform towards a circular ecosystem where products are designed for recirculation through extended use, repair, and eventually recycling. Influenced by the great insights and learnings from The Jeans Redesign project by the Ellen MacArthur Foundation, we created a Circular Product Development Guideline for our teams, an innovative tool which enables us to spread this valuable knowledge across the whole organisation to take better decisions in each step of the process. This will help us to develop more circular products at scale in the coming years.**”

Leyla Ertur, Head of Sustainability, **H&M Group**

“**Since we started working on The Jeans Redesign project two years ago, we have made great progress. The first round of designing jeans that fit with the guidelines was challenging, but with time and support from all the participants, it became progressively easier for our designers; now it is how we do things and it’s very much embedded in our culture and DNA.**”

Nikhil Hirdaramani, Director, **Hirdaramani Group**

By getting started without knowing all the solutions, initiating collaborations with organisations from across the value chain, and beginning to build organisational understanding of how to apply circular economy principles to jeans, participants have started applying these principles to other fashion products.

A number of participants have started applying circular economy principles to other garments, such as chinos, jackets, t-shirts, and accessories.

"Creativity has never been greater than during the last two years with The Jeans Redesign. As an example, we ended up designing products beyond jeans, making a jacket in collaboration with other organisations, including another of the largest manufacturers in denim. The principles of The Jeans Redesign project constantly ignite new angles to our design process."

Peter Lantz, Head of Sustainability, **Cross Textiles**

"The Jeans Redesign project challenged us to think differently about design and production decisions, from fibres to fabric to the trims we used in this denim. It also challenged us to work differently as a team, collaborating on a common set of guidelines within the cross-functional product team and also with our suppliers, who partnered with us to work through various hurdles that came up in the process. The momentum from this project inspired us to take these learnings and apply them across a much wider range of our assortment. In March, we launched Generation Good, a collection of jeans and tees for women, men, teens, and children, which incorporates many of the lessons we learned from working on The Jeans Redesign project."

Michele Sizemore, SVP of Global Product Development, **Gap**

"The experience of developing jeans according to The Jeans Redesign guidelines has triggered new thinking and application of this knowledge beyond just jeans. The guidelines have helped DEMCO to achieve a straightforward and clear solution for designing not only denim, but we have applied the principles to knitted garments like trousers, jackets, dresses, shorts, and t-shirts as well. DEMCO is now able to manufacture a whole range of products fit for a circular economy, learning from The Jeans Redesign guidelines."

Caroline Grégoire, Director of Sustainability, **DEMCO**

"The Jeans Redesign guidelines challenged us to completely rethink how we design our denim. At first, it was quite the challenge to adhere to the guidelines while also maintaining the GUESS? brand aesthetic – but we did not give up! We are proud of our GUESS? x The Jeans Redesign denim, and are now working to incorporate circular design principles throughout our brand. We are grateful for the leadership demonstrated by the Ellen MacArthur Foundation. This project resulted in valuable key learnings for the GUESS? team that have affected real, lasting change for our brand."

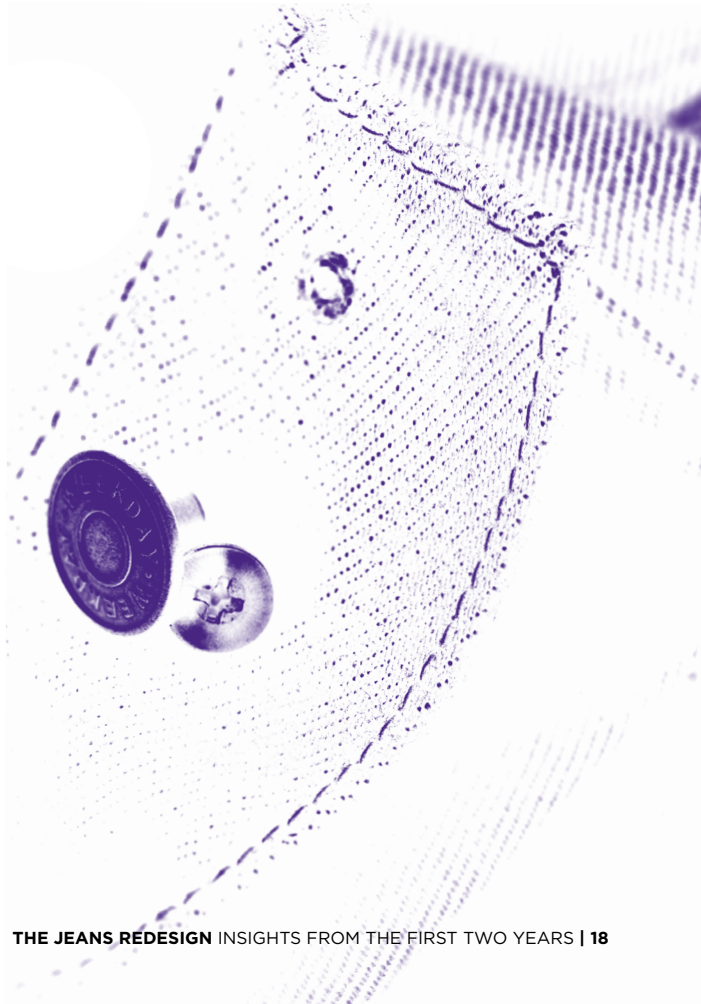
Jaclyn Allen, Director of Corporate Sustainability, **GUESS?**

2 Through collective action, participants have identified solutions, remaining barriers, and innovation gaps to scale a circular economy for all jeans and other garments

The Jeans Redesign participants set out on a journey to make jeans fit for a circular economy, collectively working towards shared minimum guidelines with common definitions.[10] This alignment has supported organisations to get started, despite not necessarily having all the answers. As a result, participants have demonstrated that it is possible to meet the majority of The Jeans Redesign criteria.* However, there remain barriers to scaling solutions across all jeans and, in a number of areas, solutions are available at a limited scale, are costly, or do not yet exist.

This is a summary of insights from the individual participant reports. For the full details, see the individual participant reports in the Appendix.

* Note all statistics in this section relate to action taken by the participants to which the criteria applied, irrespective of whether they brought fabric or jeans to market by the 31st of May 2021. Therefore percentages can exceed 80%.



For some criteria, available common solutions have been adopted by the majority of participants. However, participants have noted hurdles remain to adopt solutions more widely, across all jeans and other relevant garments.

ORGANIC CONTENT

The majority (90%) of participants have been able to source organic cotton, despite it being foreseen as one of the biggest challenges at the outset of the project. However, many have reported limited market availability and premium prices, to both source and certify this material, as a barrier to scaling.

RECYCLED CONTENT

More than half of participants have voluntarily included recycled content in fabric and jeans produced under the guidelines. 82% of which used post-consumer recycled content (ranging from 2% to 40% on average (by weight)).[11] However, many participants have reported limited market availability and premium prices to source and certify post-consumer recycled content as a hurdle to adopting it more widely. MUD Jeans, H&M, and HNST included the highest share of post-consumer recycled content of the participant group, 40%, 35%, and 21% respectively.

RIVET ELIMINATION

65% of brands have removed metal rivets completely from their products, increasing the recyclability of the jeans. Of those, 90% have reported substituting rivets with bar tacks, reinforced stitching, or embroidery techniques.

SAFE CHEMICALS

94% of participants have achieved the minimum criteria on phasing out toxic substances,[12] with 11 organisations exceeding it. Of those that have exceeded the minimum requirement, commonly reported standards used are: ZDHC MRSL Level 3,[13] Cradle To Cradle Certified®, and bluesign®. However, further work is needed to deliver product aesthetics and performance, while ensuring all chemicals and processes used to make garments are not only safer but safe.

SAFE PROCESSES

94% of brands and garment manufacturers have successfully prohibited the use of potassium permanganate, stone finishing, and sand blasting. Cross Textiles reported eliminating finishing processes completely. Other participants reported substituting conventional finishing processes with alternatives, most commonly reporting use of laser finishing, followed by ozone finishing, enzyme finishing, and abrasive plates. Banana Republic has reported that the combined use of laser finishing, enzyme washing, and wet ozone resulted in a 50% water saving, an 80% reduction in wastewater being generated, and a 90% reduction in metal waste. However, further investigation is needed to understand the impact of these techniques on the durability of garments.

RECYCLED CONTENT

Jeans have been collected and are being shredded and turned into post-consumer recycled fibres.
Credit: MUD Jeans

RIVET ELIMINATION

Examples of the use of bar tacks and embroidery techniques to replace the use of metal rivets.
Credits: Weekday, Frame, and DEMCO

SAFE CHEMICALS

Gold level Cradle To Cradle Certified® jeans.
Credit: C&A

SAFE PROCESSES

Laser finishing process being performed on jeans.
Credit: Hirdaramani

For other criteria, solutions have been found to be available, but style options and availability at scale is limited in some cases.

98% CELLULOSE-BASED FIBRE CONTENT

96% of participants have ensured a minimum of 98% cellulose-based fibres are included in the textile composition of redesigned jeans. However, limiting non-cellulose based fibres to 2% has been reported as one of the toughest requirements for participants to meet, while still delivering styles and comfort that appeal to customers, including jeans with stretch. BAM Bamboo Clothing has reported bringing to market a solution to make 'skinny' and 'slim' style jeans with stretch compliant with The Jeans Redesign guidelines, designing a material mix of 98% cellulose-based fibres (73% cotton, 25% viscose) and 2% elastane. However, further investigation is needed to assess the possibility of recycling this fabric into new fibres using widely available technologies.

DURABILITY TESTING

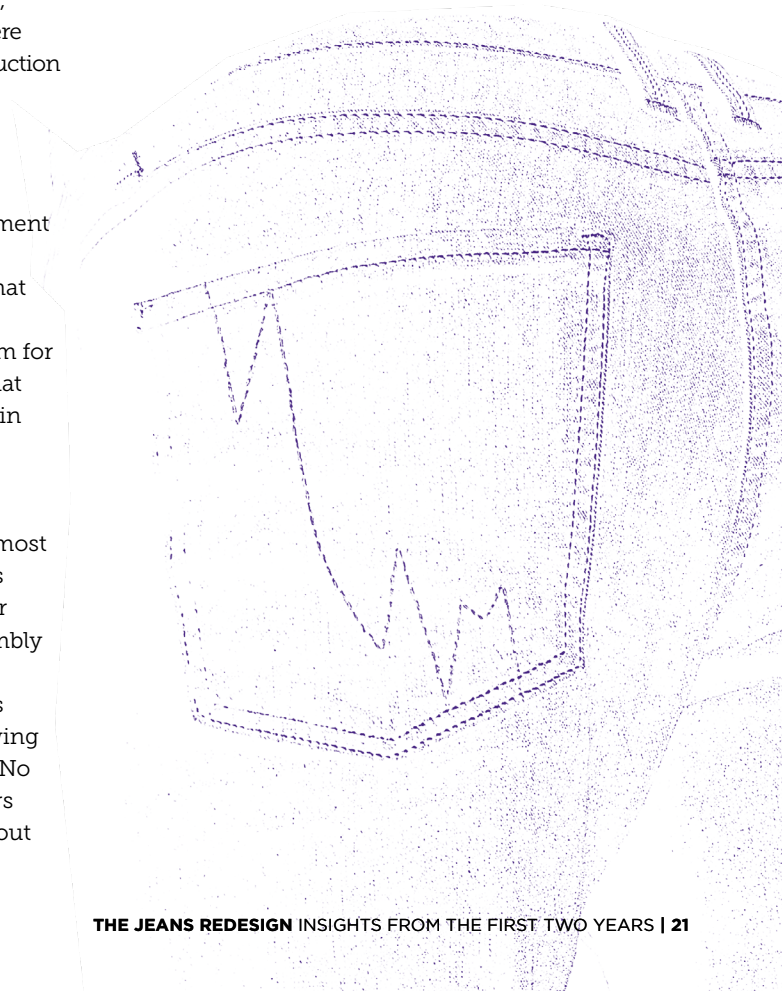
Common criteria to assess the durability of jeans have been implemented by a group of organisations from across the value chain. 92% of participants have assessed the durability of jeans, testing whether they can withstand a minimum of 30 home laundries. Fairblue Jeans, Kipaş Textiles, Cross Textiles, and Outerknown have exceeded this by testing for 35, 40, and 50 (Cross Textiles and Outerknown) respectively. However, the number and type of durability tests that are conducted by participants after washing continues to vary widely, with participants conducting between 1 and 22 tests. The most commonly reported durability tests are: tensile and tear strength, followed by dimensional stability, abrasion resistance, and colour fastness.

BUILT-IN TRACEABILITY

Use of technology as an enabler to track and trace garments to accurately sort collected clothing for reuse and recycling is still limited. 12% of brands and garment manufacturers have opted to use technology as an enabler to track and trace materials to ensure they can be used again. Participants have reported the most commonly used technologies are QR codes and RFID tags. Reformation has combined a QR code with fibre traceability technology FibreTrace®. Upon scanning, this technology redirects the reader to a website where information about the garment's composition, production processes, and fibre sourcing can be easily accessed.

HARDWARE AND STITCHING THAT CAN BE DISASSEMBLED

Design solutions and technology supporting garment disassembly have been found to be available but options are limited. 32% of brands used buttons that can be disassembled without the need to cut any fabric. However, many reported paying a premium for components that are easier to disassemble and that removal of buttons, and other components, remain labour intensive to deconstruct and are therefore a barrier to scaling. A further 13% of participating brands have reported investigating removable buttons but have not yet incorporated them. For most in this group, delays have been caused due to this hardware not meeting durability requirements for garments or due to adding labour intensive assembly to the manufacturing process, which presents a barrier to scaling. Participating brand unspun has reported using thread that can be dissolved, allowing fabrics to be disassembled for reuse or recycling. No participants reported finding a solution for zippers that can be removed and reused or recycled without losing fabric during disassembly.



98% CELLULOSE-BASED FIBRE CONTENT

Jeans with stretch, made ensuring a 98% cellulose-based fibre composition.
Credit: BAM Bamboo Clothing

BUILT-IN TRACEABILITY

Cotton fibres being scanned using FibreTrace® technology.
Credit: Reformation

HARDWARE AND STITCHING THAT CAN BE DISASSEMBLED

Examples of removable buttons used on jeans.
Credit: Weekday and Tommy Hilfiger

For a small number of criteria, solutions to make jeans fit for a circular economy are extremely limited or simply do not exist yet.

REGENERATIVE SOURCING

One brand, Reformation has reported sourcing cellulose-based fibres from regenerative sources. In particular, they have used cotton from Good Earth Cotton,[14] which uses agricultural practices that promote soil health, in turn storing carbon. Another, Wrangler, has reported that they sourced cellulose-based fibres from sources that are in transition to regenerative practices, verified by the Field to Market Calculator.[15] However, overall, participants reported identifying and sourcing cellulose-based fibres produced using practices with nature-positive outcomes is incredibly challenging to achieve. Arvind Limited, Cross Textiles, and Organic Basics have reported their organisations are exploring regenerative production, starting with establishing or funding regenerative projects with farmers. BAM Bamboo Clothing have reported they are working to measure the impact of bamboo cultivation on biodiversity with a view to creating a standard for regenerative bamboo cultivation.

Jeans made with Good Earth Cotton.
Credit: Reformation

SAFE PROCESSES FOR HARDWARE

One third of brands and garment manufacturers have reported they have either eliminated hardware finishing completely or have substituted it with an alternative to conventional electroplating. However, successfully prohibiting conventional electroplating has been consistently reported as one of the most difficult criteria to achieve. While alternatives to zippers, rivets, and buttons that avoid the conventional electroplating process exist, participants have noted they are difficult to source, costly, and do not always meet style requirements. Five organisations – Cross Textiles, DEMCO, Fairblue Jeans, unspun, and Wrangler – have eliminated the need for the process completely by designing out finishing processes from hardware, for example using raw metal. 12 organisations – American Eagle, BAM Bamboo Clothing, Banana Republic, Bestseller, Blue of a Kind, C&A, Crystal Group, Denim Village, seventy + mochi, Tommy Hilfiger, Triarchy, and Zamira Fashion Ltd – have reported using alternative processes.[16]

Aesthetic effects obtained on hardware without the use of conventional electroplating.
Credits: C&A, DEMCO, and unspun

3 Building on insights from The Jeans Redesign, businesses and policymakers must take bold action to create a circular economy for all jeans and other products

Insights from The Jeans Redesign provide a clear picture of the current landscape of solutions, barriers and innovation gaps. These insights can now be used by businesses to take action, supported by policy development designed to scale a circular economy for fashion. No one organisation can overcome these barriers alone. Businesses and policymakers will need to make concerted efforts to build on the early momentum of The Jeans Redesign.

The Jeans Redesign has provided a starting point for businesses to align on common criteria and explore the feasibility of creating a circular economy for fashion by focusing on the redesign of an iconic product. The success of participants has highlighted what is achievable but it has become equally clear that there are industry-wide barriers to creating a circular economy for jeans and other fashion products.

To continue driving the industry forward, the Ellen MacArthur Foundation calls on:

1. All businesses in the fashion industry to take bold action to adopt circular economy principles today.

The Jeans Redesign has demonstrated that it is possible to create fashion products for a circular economy. However, to transform the industry from one which contributes to climate change, biodiversity loss, waste, and pollution into a sector that is regenerative by design this demonstration needs to be built on by businesses across the fashion industry. The Jeans Redesign guidelines can provide an entry point to work from, with the Ellen MacArthur Foundation's **vision** of a circular economy for fashion providing a target state to aim towards.[17]

For the participants in The Jeans Redesign taking bold action means applying the guidelines across a greater proportion of their denim collections and beyond to all products. In July 2021, The Jeans Redesign guidelines were updated to take into account what is needed to accelerate progress at speed and scale to create a circular economy for jeans, and account for changes in the innovation landscape of the fashion industry. The willingness demonstrated by participants to include post-consumer recycled content, for example, has made it possible to introduce a mandatory recycled content requirement into the updated guidelines. As The Jeans Redesign continues, organisations are encouraged to join current participants on this journey,[18] and work together towards the updated **guidelines**.

All businesses are encouraged to continuously assess their progress towards a circular economy and increase their ambitions accordingly over time.

2. All businesses – including collectors, sorters, and recyclers – to collaborate and innovate to overcome barriers to a circular economy for fashion.

Insights from The Jeans Redesign highlighted technical barriers to align desired features of jeans with durability, recyclability, and safe materials and processes. Designing for reuse, repair, and recycling can only be effective when coupled with collection and sorting operations, with a view to keeping products and their materials and components in use.

By businesses working together, an opportunity is presented to identify solutions where currently they are available at a limited scale, at high cost, with few style choices or simply do not yet exist. Based on the the insights from the Jeans Redesign this includes finding solutions that enable products to be disassembled, such as zippers that can be removed and reused or recycled without losing fabric during disassembly, and materials innovation to offer a broader range of style and comfort for customers (including garments with stretch), that are both durable and can be widely recycled to create high-quality new materials.

Tackling these challenges will require collaboration, both across the value chain between fabric mills, garments manufacturers, hardware suppliers, brands, and recyclers, and within organisations. Innovation is needed both at the product design stage and at a system level. Business models and take-back schemes are crucial to keep products in use, and infrastructure development is imperative to ensure products and materials are circulated in practice.

Investment will be needed to support this design innovation agenda, both by individual organisations and through cross value chain partnerships. Funding for collection, sorting and recycling in practice and at scale can also be supported through business investment, as well as support for policy actions such as well-designed Extended Producer Responsibility (EPR) schemes (See call to action 4).

3. All businesses and policymakers to align on definitions of and parameters for regenerative production and sourcing, and put in place enabling mechanisms to support production of materials in ways that have nature-positive outcomes.

The Jeans Redesign has highlighted the significantly limited availability of fibres that are grown using practices with nature-positive outcomes. To develop this market, businesses need to signal demand and make commitments to use these fibres. At the same time, support is needed from policymakers through mobilising public and private capital to increase regenerative production capacity and development of policies that set the direction of travel and provide incentives for businesses.

To stimulate production of fibres with nature-positive outcomes, businesses across the industry – from farmers to brands and retailers – need to align on definitions of what nature-positive outcomes[19] are and how they can be prioritised. Once this is widely understood and accepted, businesses should set commitments to source materials that meet these parameters and develop credible plans to make regernativer product portfolios a future reality. Effort will be required from businesses to increase transparency at the raw material level, to increase knowledge on where their materials come from and how they are produced.

Both businesses and policymakers can support scaling of fibres produced in ways that have nature-positive outcomes by supporting farmers to transition to these production practices. Technical assistance and training can be made available to engage and incentivise farmers to switch to, or increase their regenerative production. Policymakers can facilitate this through, for example, commitments, public subsidies redirection and finance incentives.

4. Policymakers to create the enabling conditions for the circular economy to emerge at scale in the fashion industry, building on a set of common policy goals[20].

Policymakers can set a direction of travel and create the enabling conditions that support scaling of a circular economy for fashion. For example, policies can be developed to support products and materials staying in use for as long as possible through action such as setting minimum design requirements, incentivisation of new business models, and support for innovation, infrastructure, and skills development.

Product policies can deliver a harmonised approach across markets and mobilise innovation. For example, by defining standardised metrics on aspects such as durability ("what does it mean and how do we measure it"), regulators can set a minimum ambition level as a starting point for the industry and combine it with incentives for early adopters. Policies can be developed to support products staying in use for as long as possible, thereby also helping to reduce overall collection volumes and costs. Alongside this, policymakers can help create the necessary infrastructure to keep materials at their highest value through, for example, well-designed Extended Producer Responsibility (EPR) schemes, which enable funding for scaled and harmonised collection and sorting systems to help prevent materials from ending up in landfill or incineration. The development of EPR systems can also mobilise investments in research and development (R&D), helping to bridge innovation gaps such as the limited availability of material detection techniques, automated sorting, as well as solutions for blends and components that are currently not recyclable.

Standards and incentives can also be developed to provide businesses with direction and incentives to use not only safer but safe inputs and processes. Product policies can support uncontaminated material streams that are safe to recirculate. This would increase collection, sorting, recycling, and redistribution efficiency in a circular economy, at the same time as maintaining material integrity and increasing material productivity.

Now is the time to take action to redesign all garments and build a circular economy for fashion.

Note on Covid-19

Despite the impacts of the Covid-19 pandemic, 54% of the participant group (39 new organisations) have joined The Jeans Redesign since the pandemic began. These organisations have committed to create fabric or jeans fit for a circular economy and have taken action to meet the guidelines, even during extremely challenging times.

While it is too early to understand the full implications of the Covid-19 pandemic, it is evident that the fashion industry has been among the sectors most impacted.[21,22] The global denim industry is no exception. The pandemic began part way through The Jeans Redesign.[23]
While the extent to which the pandemic has impacted The Jeans Redesign participants has varied, many have reported that disruptions to global denim supply chains have challenged their ability to design, manufacture, and bring products to market on time. Despite these circumstances, 80% of participants made fabric or jeans compliant with The Jeans Redesign guidelines, resulting in brands putting more than half a million pairs of jeans fit for a circular economy on the market.

By highlighting some of the main drawbacks and the fragility of our current linear economy, the pandemic has reinforced the need to rethink our economic model and build a more resilient system. As we look for ways to recover from the economic shock of Covid-19, the circular economy presents opportunities to address global challenges,[24] including climate change, biodiversity loss, waste, and pollution, while helping us regenerate the environment, create jobs, and benefit society.

Endnotes

1 Ellen MacArthur Foundation, **A New Textiles Economy: Redesigning fashion's future** (2017)

2 Ellen MacArthur Foundation, **Completing the picture: How the circular economy tackles climate change** (2019)

3 C&A and Fashion For Good, **Developing Cradle to Cradle Certified™ Jeans** (2018)

4 These outcomes include, but are not limited to healthy and stable soils, improved local biodiversity, improved species diversity of crops, cleaner air and water. These outcomes can be realised by adopting a variety of context-dependent practices. There are several different schools of thought that may be drawn from such as regenerative agriculture, agroecology, organic, permaculture, agroforestry, and conservation agriculture.

5 Ellen MacArthur Foundation, **Vision of a circular economy for fashion** (2020)

6 Ellen MacArthur Foundation, **Universal circular economy policy goals** (2021)

7 Ellen MacArthur Foundation, **Vision of a circular economy for fashion** (2020)

8 Ellen MacArthur Foundation, **The Jeans Redesign Guidelines** (2019)

9 Investments of USD 14.5 million were made by 15% of participants in: knowledge (including training existing employees, hiring specialised staff, engaging external consultants), fixed assets (including equipment, technology, and plants), inventory (including certification, and safe chemicals), procurement (including premiums paid to source organic cotton, post-consumer recycled content, and removable components) and capabilities, to create fabric and jeans in line with The Jeans Redesign guidelines.

10 Ellen MacArthur Foundation, **The Jeans Redesign Guidelines** (2019)

11 Post-consumer recycled content from apparel-to-apparel recycling is the preferred source of recycled feedstock, as it allows the industry to continuously cycle the materials it puts on the market, and avoid material value loss within its own and other industries. The use of post-consumer recycled content from other industries can help reduce the need for virgin input in the fashion industry and hence increase the profitability of collectors, sorters, and recyclers. However, this option must not prevent higher-value recycling in those industries, and within the fashion industry itself, when this is possible.

12 Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. See page 10 of Ellen MacArthur Foundation, **The Jeans Redesign Guidelines** (2019) for further details on the requirement.

13 Level 3, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL).

14 The University of Queensland Australia, **Good Earth Cotton (property known as "Keytah") Carbon Emissions Audit** (2019)

15 See Wrangler's individual participant report in the Appendix for further details.

16 See their individual progress reports in the Appendix for further details.

17 The Ellen MacArthur Foundation: **Vision of a circular economy for fashion** (2020)

18 Subject to sign-up criteria

19 These outcomes include, but are not limited to healthy and stable soils, improved local biodiversity, improved species diversity of crops, cleaner air and water. These outcomes can be realised by adopting a variety of context-dependent practices. There are several different schools of thought that may be drawn from such as regenerative agriculture, agroecology, organic, permaculture, agroforestry, and conservation agriculture.

20 Ellen MacArthur Foundation, **Universal circular economy policy goals** (2021)

21 Business of Fashion and McKinsey & Company. **The State of Fashion 2020 — Coronavirus Update** (2020)

22 World Economic Forum. **These charts show how COVID-19 has changed consumer spending around the world.** (2020)

23 The first two years of The Jeans Redesign ran from July 2019 to May 2021.

24 The Ellen MacArthur Foundation: **The circular economy: a transformative Covid-19 recovery strategy** (2020).

Appendix

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Vision of a circular economy for fashion

In a circular economy for fashion, products (apparel, footwear, accessories) **are:**

- **Used more**
- **Made to be made again**
- **Made from safe and recycled or renewable inputs**

Read the full vision and definitions here

Disclaimer

This report has been compiled by the Ellen MacArthur Foundation (the **Foundation**), with input from participants of The Jeans Redesign.

The information relating to each participant's progress, reporting, and company information has been submitted to the Foundation by that participant, and has not been audited or verified by the Foundation. Participants are responsible for all submitted data, which has been inserted verbatim in reporting templates in the Appendix of this report.

The information provided in this report is made available on an 'as is' basis and the Foundation makes no representations and provides no warranties to any party in relation to any of its content. The Foundation (and its related people and entities and their employees and representatives) shall not be liable to any party for any claims or losses of any kind arising in connection with or as a result of use of or reliance on information contained in this document, including but not limited to lost profits and punitive or consequential losses.

Where a participant has not provided its commitment information within the timeframes requested by the Ellen MacArthur Foundation its Individual Progress page has been included indicating where no data has been provided. This version of the Individual Progress Reports was completed on 1st July 2021.

If you are a participant and you believe there has been an error in the reproduction of the information provided to us by your organisation, please contact us as soon as possible at **jeans@ellenmacarthurfoundation.org**, so that we can update our records.

Reader guide to individual participant reports

The Individual Participant Reports are separated into four sections, one for each sector of the value chain represented in The Jeans Redesign: Brands and Retailers, Garment Manufacturers, Fabric Mills, and Laundries. They are represented by the following icons.

Brands and Retailers

Garment Manufacturers

Fabric Mills

Laundries

In each organisation's individual participant report, the icon representing the sector of the value chain they operate in is highlighted in purple, the rest are greyed out. In cases where organisations operate across more than one sector of the value chain, all relevant symbols are highlighted in purple and their individual participant report can be found in the section corresponding to the first highlighted sector they operate in. For example, if a vertically integrated organisation operates both as a garment manufacturer and a fabric mill, both relevant symbols are highlighted in purple and the individual participant report can be found in the garment manufacturer section.

Each individual participant report includes:

- General information about the organisation (headquarters, website, product launch, category, organisation description, and contact)
- Action taken by the organisation to produce jeans or fabric in accordance with The Jeans Redesign guidelines by May 2021. Criteria are organised by the sections of the vision of a circular economy for fashion. The Jeans Redesign guidelines include a combination of mandatory and optional criteria. In the individual participant reports, **mandatory criteria are coloured in purple** and **optional criteria are coloured in pink**.

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Brands and Retailers

American Eagle

Headquarters
Pittsburgh, Pennsylvania, United States

Website
aeo-inc.com

Product launch
May 2021

Category

Organisation description

American Eagle Outfitters, Inc. (NYSE: AEO) is a leading global specialty retailer offering high-quality, on-trend clothing, accessories and personal care products at affordable prices under its American Eagle® and Aerie® brands. Our purpose is to show the world that there's REAL power in the optimism of youth. The company operates stores in the United States, Canada, Mexico, and Hong Kong, and ships to 81 countries worldwide through its websites. American Eagle and Aerie merchandise also is available at more than 200 international locations operated by licensees in 25 countries. For more information, please visit www.aeo-inc.com. At AEO we believe we have a responsibility to build a better world. We lead with purpose and are guided by our values. We understand that every action we take—even the small ones—can have a huge impact. By taking measures to ensure more responsible product sourcing, we're able to do our part in creating a better future for generations to come.

As part of AEO's broader sustainability goals we've made a commitment to move toward more sustainable raw materials and manufacturing techniques, as well as reducing our water and energy usage. We work with our jeans factories through AEO's Water Leadership Program to set standards and goals around water and chemical management, water reduction and recycling, and wastewater requirements. Our teams are driven to continue to find new ways to make AE jeans in the most sustainable ways possible, from responsibly sourcing more sustainable cotton and other raw materials to developing new washing techniques that achieve our design and quality requirements with less water. We are proud to be a part of the Ellen MacArthur Jeans Redesign initiative to design and produce jeans with circularity, and to drive improvements in our practices. AEO's participation in The Jeans Redesign reinforces our promise to create products that are more sustainable, while offering our customers great styles that feel good to wear inside and out.

Contact

Michelle Tarry, Sr Director, Responsible Sourcing, American Eagle Outfitters

JEANS PRODUCED ACCORDING TO THE GUIDELINES

American Eagle Outfitters exceeded their initial commitment and produced more jeans (in accordance with the Guidelines) than they originally aimed to by May 2021. Volumes have been submitted to the Foundation only. To develop this capsule collection, American Eagle brought together a cross-functional team from design, production and merchant departments. The team worked closely with one of the company's strategic factories to create a collection that they knew the customer would love, for both its aesthetics as well as its sustainable characteristics.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet American Eagle Outfitters Inc.'s minimum test standard for jeans, which is:

- Appearance, tearing and tensile strength

Aimed to verify this by third party verification.

American Eagle Outfitters Inc. tested jeans for 30 home laundries and performed three durability tests (appearance, tearing and tensile strength) to meet their minimum test standard for jeans, verified by third party verification.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by: care labels with information regarding less washing, using cold water, and hang drying in the final garment.

American Eagle Outfitters Inc. included an easily accessible label with a communication indicating to (1) wash less frequently, (2) use cold water and (3) avoid tumble drying, verified by printing on the pocket bag.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by third-party inspection to confirm garment content.

American Eagle Outfitters Inc. ensured material composition met a 98% cellulosic minimum and verified this by third-party inspection to confirm garment content.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that is added to the fabric. All trims will be kept to a minimum with these styles, additional materials are not planned to be added.

American Eagle Outfitters Inc. ensured any additional materials added to the fabric were easy to disassemble, for example all trims have been kept to a minimum with these styles, additional materials are not planned to be added.

c. Remove rivets entirely or reduce them to a minimum

Did not aim to remove metal rivets entirely or reduce them to a minimum.

American Eagle Outfitters Inc. ensured metal rivets were reduced to a minimum for these styles. All rivets were removed for both the men's and women's styles.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

American Eagle Outfitters Inc. ensured Jeans Redesign logo was used, by printing on the pocket bags. Together with The Jeans Redesign logo are the instructions to wash less frequently, use cold water, and avoid tumble drying.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

Did not ensure technology that enables sorting was used because they have not added additional technology to the items.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. American Eagle Outfitters Inc. aimed to verify this through ZDHC Gateway.

American Eagle Outfitters Inc. ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway. The team collaborated closely with the factory to develop a wash that met aesthetic requirements while remaining in compliance with chemical requirements.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of the conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by American Eagle Outfitters Inc.'s suppliers, the American Eagle Outfitters Inc. wash and compliance teams, and third-party inspectors as needed.

American Eagle Outfitters Inc. had already prohibited the use of sand blasting since 2011. For this collection, the company additionally prohibited the use of the chemicals and processes above and verified this through their suppliers, our AEO wash and compliance teams, and third-party inspectors as needed.

American Eagle Outfitters Inc. prohibited the use of conventional electroplating. The hardware on the collection is aluminium with a lacquer finish. The aluminium is lighter weight, and additionally very malleable so can be easily snipped off for recycling. The zipper is made using an acroplating process, which eliminated the electroplating process.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from regenerative farming, organic or transitional methods. Aimed to verify this by Global Organic Textile Standard (GOTS) or the Organic Content Standard (OCS).

American Eagle Outfitters Inc. sourced cellulose-based fibres from organic methods and verified this through Organic Content Standard (OCS).

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

For this collection, American Eagle focused on sourcing organic cotton for the denim fabric. The company will review options to additionally source post-consumer recycled content for future collections.

Atelier and Repairs

Headquarters
Los Angeles, California, United States

Website
https://atelierandrepairs.com/

Product launch
N/A

Category

Organisation description

Atelier & Repairs is a design-driven product and services platform dedicated to circularity. We approach design from the perspective of sustaining a product through many lives by utilising intentionally selected leftover and sustainably made textiles while manufacturing with as little environmental impact as possible. Our mission is to establish a new world standard of infinite reuse by reducing excess at both artisanal and industrial levels.

Contact

Marisa Ma, Co-Founder

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Atelier and Repairs did not meet their commitment and have not produced any jeans (in accordance with the Guidelines) by May 2021. This was due to a temporary halt in manufacturing due to COVID-19 facility shutdown. However, the company is on track to produce jeans (in accordance with the Guidelines) and launch them on the market in the coming future. In addition, the company has been producing and selling collections that, although not compliant with the Guidelines, apply the circular economy strategy of remanufacturing old fabrics into new products.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet ATELIER & REPAIRS' minimum test standard for jeans. Aimed to verify this by requesting relevant certification by the facilities that will be included in the manufacturing process.

ATELIER & REPAIRS did not test jeans for 30 home laundries, as they have not produced any jeans yet. However, this requirement is in progress for jeans to be launched in the future. In addition, the company has produced and sold remanufactured jeans (not compliant with the Guidelines) that have been subject to post consumer wash standards at point of sourcing, given that they are used before they are transformed.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label with the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to line dry
- Instructions to avoid tumble drying

Aimed to verify this by the textile supplier on an accessible label.

ATELIER & REPAIRS did not include an easily accessible label with the information stated above, as they have not produced any jeans yet. However, for their planned launch of Guideline-compliant jeans, they are on track to include an easily accessible label with the information stated above, except that "Avoid tumble drying" is replaced with "Hang to dry" instructions.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by requesting relevant certification by the facilities that will be included in the manufacturing process.

ATELIER & REPAIRS did not meet 98% cellulosic minimum material composition, as they have not produced any jeans yet. However, they are on track to meet this requirement for their planned launch of Guideline-compliant jeans. To achieve this, they will require specific sourcing requirements on textile and trim suppliers, who will verify the content in order to ensure compliance.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

ATELIER & REPAIRS did not ensure additional materials added to the fabric were easy to disassemble, as they have not produced any jeans yet. However, they are working to ensure this for their planned launch of Guideline-compliant jeans, by sourcing trims from accredited suppliers and designing garments for easy fabric disassembly.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

ATELIER & REPAIRS did not ensure metal rivets were removed entirely or reduced to a minimum, as they have not produced any jeans yet. However, they are working to eliminate rivets for their planned launch of Guideline-compliant jeans, by imposing specific sourcing requirements on textile and trim suppliers and by embedding alternatives in the design direction. In addition, jeans produced by ATELIER & REPAIRS from remanufactured fabrics are left with their original trims, as removing them would create waste.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

ATELIER & REPAIRS did not ensure Jeans Redesign logo was used, as they have not produced any jeans yet.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. ATELIER & REPAIRS aimed to verify this through the ZDHC Gateway.

ATELIER & REPAIRS did not ensure jeans used chemicals that comply with Level 1, ZDHC MRSL, as they have not produced any jeans yet. However, they are working to ensure this for their planned launch of Guideline-compliant jeans, by imposing specific sourcing requirements on accredited and compliant suppliers.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by requesting relevant certification by the facilities that will be included in the manufacturing process.

ATELIER & REPAIRS did not prohibit the use of the chemicals and processes above, as they have not produced any jeans yet. However, they are working to ensure this for their planned launch of Guideline-compliant jeans, by embedding it in the design direction. Most of the work they do is based on hand-treatments, and they will ensure that any automation will not incur in prohibited processes. In addition, jeans produced by ATELIER & REPAIRS from remanufactured fabrics do not require any of these chemicals or processes as they are naturally aged through wear and time.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS).

ATELIER & REPAIRS did not source cellulose-based fibres from organic methods, as they have not produced any jeans yet. However, they are working to ensure this for their planned launch of Guideline-compliant jeans, by embedding it in the design direction.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

However, they will be working on this with accredited and compliant suppliers who must utilize traceable and compliant recycled content. In addition, ATELIER & REPAIRS has been producing and selling jeans made from post-consumer remanufactured fabrics that, although not compliant with the Guidelines, demonstrate an application of the circular economy strategy of remanufacturing.

Balzac Paris

Headquarters
Paris, France

Website
https://balzac-paris.fr/

Product launch
April 2020

Category

Organisation description

«Il faut toujours bien faire ce que l'on fait, même une folie.» *Honoré de Balzac* (1799-1850).

You always have to do well what you do, even madness. This quote is the base for Balzac Paris. With Charles and Victorien, we made a crazy bet: create our fashion brand, with the motto thinking "La Mode Autrement" and three letters to lead the dance: T.P.R (Toujours Plus Responsable = Always More Responsible). For us, pollution is not unavoidable in the fashion world and we believe we have a role to play in reducing our impact on the environment and changing mentalities.

To achieve this challenge, the whole Balzac Paris' team mobilize on a daily basis to always offer more responsible materials, natural processes, serious labels, artisanal know-how and transparency. While respecting our historic ambitions: European manufacturing and blameless quality. Since 2014 Balzac Paris have seen more and more people wearing T.P.R. Thank you for engaging with us, we look forward to writing Balzac Paris' next chapters. Please continue to inspire us every day with #vousenbalzacparis.

Contact

Marie-Emmanuelle Demoures, Responsable de collection, Maison Balzac

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Balzac Paris exceeded their initial commitment and produced 100% of their jeans portfolio in accordance with the Guidelines by May 2021. Volumes have been submitted to the Foundation only.

Balzac Paris reported no problems in achieving their commitment, except some difficulties with the implementation of ozone washing.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Balzac Paris' minimum test standard for jeans. Aimed to verify this by requesting relevant certification by the facilities that will be included in the manufacturing process.

Balzac Paris tested jeans for 30 home laundries and performed one durability test (dimensional stability) to meet their minimum test standard for jeans. Balzac Paris did this by requesting their suppliers to test for dimensional stability. Challenges were encountered related to higher fragility of the fabric due to ozone washing.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by in-house inspection processes. That information will be clearly added to the care label.

Balzac Paris included an easily accessible label with the information stated above.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by requesting relevant certification by the facilities that will be included in the manufacturing process. Balzac Paris' blend contains at the maximum 1% of elastane.

Balzac Paris ensured material composition met a 98% cellulosic minimum and verified this by writing the composition on the care label.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The Jeans will include trims such as woven label, care label and Balzac Paris confirms it is easy to remove by cutting out.

Balzac Paris ensured any additional materials added to the fabric were easy to disassemble.

The only materials added to the jeans were the label, the button fly and the jacron. From September 21, Balzac Paris aims to substitute buttons with screwable buttons. In addition, they aim to change the material composition of the jacron from 100% PU to a mix of 90% FSC paper and 10% other fabric.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely.

Balzac Paris has removed all rivets from their jeans as of February 2020. Balzac Paris added stitching points where the rivets were removed. They have not reported any quality issues associated with this.

d. Use The Jeans Redesign logo

Did not aim to use The Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

Balzac Paris ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the Global Organic Textile Standard (GOTS), which is accepted as an equivalent to ZDHC Level 1 according to the latest version of the document "ZDHC Accepted* Conformance Indicators for Verification Against the ZDHC Manufacturing Restricted Substances List (ZDHC MRSL)"

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by a written declaration by the manufacturer.

Balzac Paris prohibited the use of potassium permanganate, stone finishing, sand blasting, and conventional electroplating, and verified this by getting a written declaration from the manufacturer. This has also been verified by the Global Organic Textile Standard (GOTS). Balzac Paris reported that some difficulties with ozone washing were encountered, as it made the fabric more fragile.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this through the Global Organic Textile Standard (GOTS).

Balzac Paris sourced cellulose-based fibres from organic methods and verified this through the Global Organic Textile Standard (GOTS).

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. Stated that the company is currently working on it.

BAM Bamboo Clothing

Headquarters
Plymouth, United Kingdom

Website
https://bambooclothing.co.uk/

Product launch
September 2020

Category

Organisation description

BAM designs and manufactures soft and sustainable bamboo activewear. I founded the company in 2006, not only inspired by the amazing qualities of bamboo, but also wanting to prove that a business could be successful by doing things 'the right way', both environmentally and socially. We have spent the last two years tracing back through all the layers of our supply chain, right back to the forests where our bamboo is grown. We believe that the best way to know what is going on in your supply chain is to see it for yourself, to meet the people who are involved.

It is more important than ever for every company in the textile industry to take responsibility for the footprint it creates throughout the production life cycle.

For BAM, this begins with choosing low impact raw materials such as bamboo and organic cotton, increasing durability and designing out waste. We're always innovating to create lower impact products and circularity is now a top priority when developing these new ranges.

The 'Make Fashion Circular' initiative sits perfectly within BAM's sustainable business strategy and we are proud to be participating in The Jeans Redesign project. The guidelines provided have been invaluable for the development of BAM's forthcoming range of jeans which will include some exciting design features. Not least is the addition of bamboo viscose which adds some fantastic performance attributes to the fabric, making our jeans suitable for all kinds of activities.

Contact

David Gordon, Founder of BAM

JEANS PRODUCED ACCORDING TO THE GUIDELINES

BAM exceeded their initial commitment and produced 100% of their jeans portfolio in accordance with the Guidelines by May 2021. Volumes have been submitted to the Foundation only. Since BAM had no existing denim range prior to this commitment, it was easy for them to achieve it as they developed jeans in line with the guidelines from the beginning. The number of units BAM has produced since originally signing up to The Jeans Redesign has been much higher than anticipated due to the commercial success of the products. The range has grown in volume and options over the three seasons of production since launching.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet BAM's minimum test standard for jeans, which is:

- Appearance: CA-TM 02 OR GAAW x 30 (TBC)
- Dimensional stability ISO 6330
- Tensile force ISO 139342
- Seam force ISO 13935-2
- Abrasion ISO 12947-2

Aimed to verify this by third party testing. Wearer trial testing: We have several brand ambassadors who are professional climbers. We have arranged for a day at a climbing centre near our head office in Devon where they can test how our new jeans fare during some intensive climbing. They will then get to keep the garments and provide us with regular feedback over the following months on how the garments wash and wear.

BAM tested jeans for 30 home laundries and performed eight durability tests (garment appearance after wash x 30 washes, dimensional stability, tensile force, seam force/bursting strength, abrasion, colour fastness to dry rub, colour fastness to wet rub, pilling) to meet their minimum test standard for jeans, verified by third party testing. We also have several brand ambassadors testing our products and providing feedback. After launching the first batch we received feedback that holes were appearing in the pocket bags quite quickly - we have now updated the pocket bag fabric to be a heavier weight cotton so that we can improve durability but still avoid using a cotton poly blend.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency – bamboo content will help to combat odours, meaning less washing is needed.
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Wash inside out
- Natural fade in colour over time is expected

Aimed to verify this by the presence of a care label attached to the garment or a direct print onto garment. Instructions will also need to remain visible after 30 home laundries.

BAM included an easily accessible label with the information stated above, verified by care label information printed onto the inside pocket bags. Including information on The Jeans Redesign as well as care info such as washing less, washing inside out to reduce fading and abrasion, line drying to cut emissions from tumble driers and recycling instead of throwing out. Washing temperature is 30 degrees.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by third party fibre analysis testing.

BAM ensured material composition met a 98% cellulosic minimum and verified this by third party fibre analysis report for main fabric. In particular, BAM made jeans out of the following materials:

- Main fabric composition: 73% organic cotton 25% bamboo viscose 2% elastane
- Pocket bag fabric: 100% cotton
- YKK zip tape: 100% cotton
- Thread: 50% cotton 50% polyester

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The jeans will include metal zip teeth and buttons which will be easy to remove by cutting out.

BAM ensured any additional materials added to the fabric were easy to disassemble, for example jeans have an unscrewable shank button. BAM received feedback that buttons were becoming loose in the wash, so they have increased the shank length and added additional messaging for customers to advise tightening before washing.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely.

BAM ensured metal rivets were removed entirely by leaving rivets out of the initial design and adding bar-tacks to provide additional strength and durability to high stress points.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo. The Jeans Redesign Logo will be printed onto the care label or an additional woven label stitched into the garment.

BAM ensured Jeans Redesign logo was used, by including it in the print on the inside pocket bags.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting. However, BAM aimed to launch the jeans with a take-back scheme making it easy for customers to ensure the product ends up in the correct waste stream.

BAM did launch a service to allow customers to send their denim (as well as other clothing) using a pre-paid bag to a charity they have partnered with, where the jeans could be repaired if needed and donated to people experiencing clothing poverty in the UK. They are also working with the charity on enabling better sorting for clothing that is unsuitable for donation into the most suitable waste stream.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. BAM aimed to verify this through the ZDHC Gateway.

BAM ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway, where both the dye house and washing facility are meeting MRSL requirements.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. This will be verified by a written declaration from the manufacturer and/or the processor. BAM may be able to provide further certification from the processor after the bulk fabric is ordered but this is not confirmed yet.

BAM prohibited the use of the chemicals and processes above and verified this through classic indigo finish design with no distressing or additional finishing.

BAM prohibited the use of conventional electroplating, replacing it with Bluesign certified plated button and YKK metal zip.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from regenerative farming, organic or transitional methods. Aimed to verify this by:

- Cotton Content: Cotton will be organically grown. This will be verified by Organic Content Standard (OCS) transaction certificate for the fabric.
- Viscose content: Raw material will be bamboo, a rapidly renewable natural resource, sourced from an FSC certified plantation.
- Declaration from supplier on bamboo viscose source and from fibre producer for bamboo source.

BAM sourced cellulose-based fibres from organic methods and verified this through the following methods:

- 73% organic cotton: Organic Content Standard (OCS) transaction certificate
- 25% bamboo viscose: verified through a declaration from the supplier on the bamboo viscose producer that they are sourcing from.

Additionally, they are working with the consultancy Nature Positive which aims to measure the specific impacts on biodiversity of the cultivation of their bamboo as well as the production of the pulp and viscose used in their products with a view to creating a standard for regenerative bamboo cultivation.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

However, they plan to introduce some recycled cotton into the blend for next season and they are also looking into recycled elastane.

Banana Republic

Headquarters
San Francisco, California, United States

Website
https://www.bananarepublic.co.uk/

Product launch
March 2021

Category

Organisation description

Banana Republic was founded in 1978 as one of the first (if not only) upcycle brands. We traveled the world sourcing surplus clothes to mend, modernize and make our own. More than 40 years later, our journey toward sustainability continues, and we're proud of the steps we've implemented to reduce the impact our products have on nature. Over the past two years, BR denim has led the movement towards sustainability by sourcing and using recycled, organic, and American-grown cotton.

The BR denim team has focused on Gap Inc's Washwell™ Program, which uses less water than conventional garment washing techniques, along with water-saving bio-softeners, dyeing processes, and trims with eco finishes. Partnering with Ellen MacArthur Foundation on The Jeans Redesign is a great opportunity to funnel these initiatives into our most sustainable jeans to date.

Contact

Nathaniel Freeman, Design Director, Denim, Banana Republic

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Banana Republic exceeded their initial commitment and produced more jeans (in accordance with the Guidelines) than they originally aimed to by May 2021. Volumes have been submitted to the Foundation only.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Banana Republic's minimum test standard for jeans, which is:

- Tearing Strength: ASTM D 2261-2017
- Tensile Strength: ASTM D 5034-2009 (2013)

Banana Republic tested jeans for 30 home laundries and performed two durability tests (tearing strength and tensile strength) to meet their minimum test standard for fabric. This was verified by testing every wash with their internal GIS (Gap International Sourcing) teams.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by the presence of a care label on the product.

Banana Republic included an easily accessible label with the information stated above, verified by information in the pocket bag.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by fibre composition disclosed on Care and Content Label.

Banana Republic ensured material composition met a 98% cellulosic minimum and verified this by fabric was 98% organic cotton and pocket bags were 100% cotton. As part of the non-cellulosic content allowance, they used recycled elastane from ROICA™.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. Aimed to use one centre front metal shank that is easy to remove by cutting or pulling off.

Banana Republic ensured any additional materials added to the fabric were easy to disassemble. In particular, the centre front metal shank is easy to remove by cutting off.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely. Only metal hardware will be the Centre Front (CF) Shank.

Banana Republic ensured metal rivets were removed entirely, by removing them completely from the design stage. They added bar tacks on the seams as a replacement.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Banana Republic ensured Jeans Redesign logo was used, by including it on pocket bag.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Banana Republic aimed to verify this through the ZDHC Gateway.

Banana Republic ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through laundry compliance which was monitored by their partners at GIS (Gap International Sourcing).

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of the conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by the use of ZDHC Gateway, EIM (Environmental Impact Measuring) software, GAP Inc Sand blasting Policy, which bans sand blasting, and Gap Inc Wash Well (low water garment washing).

Banana Republic prohibited the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. The desired shank colours have been achieved through chemical reactions instead of conventional electroplating. Further characteristics related to the processes being used were: cyanide-free, 60% less electricity, 50% less water, 90% less metal waste, 80% wastewater reduction, 90% water recycling and reuse rate.

Banana Republic used laser finishing to replace potassium permanganate, enzyme washing to replace stone washing, wet ozone to replace bleaching, as well as a bio-based softener (BST miDori SP 3.0).

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from regenerative farming, organic, or transitional methods. Aimed to verify this through the use of certified organic fibres.

Banana Republic sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) certification.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

Bestseller A/S - Vero Moda

Headquarters
Brande, Denmark

Website
https://about.bestseller.com/

Product launch
July 2020

Category

Organisation description

Since 1987, VERO MODA has been present in the mind of young women looking for new trends, accessible styles and fashionable must-have items. We were one of the first brands to launch within what later became the BESTSELLER family. Today we are a part of a global and successful family business with stores and employees all around the world. Fast-fashion is our metier. A vibrant and accessible approach to fashion is our trademark. And being together in style is our brand essence. We navigate in an ever-changing fashion world, but we never lose sight of our values. Divided into different departments, we ensure always to have specialists in different fields, each doing their best to create results and simple solutions for everyone. However, fashion is something we do together. In a world of me, VERO MODA celebrates the us.

VERO MODA is proud to participate in the Ellen Macarthur Foundation's valuable project: The Jeans Redesign.

For VERO MODA, this project is the start of our circular journey, where we will learn and contribute to making fashion circular. A circular mindset is very important for our industry and we are aware that we all need to actively embrace more sustainable and responsible behaviour. Jeans Redesign has a clear purpose and structured guidelines, which gives us huge incentive to participate and look at how we make our jeans. We are proud to be involved in this project and we look forward to working with our designers, suppliers and other partners in our supply chain to turn our ambitions into reality.

"Changes need to be made. So we have decided to join Make Fashion Circular Jeans Redesign as it is important to us that we do our part, protecting and preserving the environment for future generations. Jeans are durable, so let's design for longevity and make our jeans with a circular mindset."

Contact

Maria Hojholt Jensen, Sourcing and Sustainability Responsible, Bestseller

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Bestseller produced 16% of the total volume of jeans (in accordance with the Guidelines) initially aimed to by May 2021.

Volumes have been submitted to the Foundation only. This was due to difficulty in matching commercial style and price with Jeans Redesign criteria.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Bestseller's minimum test standard for jeans. Aimed to add specific test methods by 9th August 2020. Aimed to verify this by a third party test institute.

Bestseller tested jeans for 30 home laundries and performed three durability tests (Tear resistance EN/ISO 13937-1, Tensile strength EN/ISO13934-1, Change of surface: ISO 12945). The home laundry procedure was: 30ºC gentle wash, line dry. This was verified by their garment supplier in their own test lab, but was not verified by a third party test institute.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by a valid third party test institute.

Bestseller included an easily accessible label with the information stated above. The care label was ordered through the care label company Clotex.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by composition test performed by either Organic blend/content standard or GOTS certified fibre from yarn mill or branded fibre from Lenzing.

Bestseller ensured material composition met a 98% cellulosic minimum and verified this by using 100% Cotton - Recycled, 99% Cotton - Recycled, 1% Elastane, 99% Cotton - Recycled, 1% Elastane.

b. Enable easy disassembly of any additional components added to the fabric

Did not aim to enable easy disassembly of any additional materials that is added to the fabric.

Bestseller ensured any additional materials added to the fabric were easy to disassemble, by cutting out the zip fly and the button.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Bestseller ensured metal rivets were removed entirely. They achieved this by adding extra sewing thread.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Bestseller ensured Jeans Redesign logo was used, by using Jeans Redesign logo on Tag on style.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Bestseller aimed to verify this through the ZDHC Gateway.

Bestseller ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through ZDHC Gateway.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by using Jeanologia EIM system to measure the environmental impacts of the specific washes and ensure it is a Low Impact wash.

This can be verified from BESTSELLER internal environmental team or a third party – all sites have an onsite verification.

All metal trims will have a third party verification on process (non-conventional electroplating). Environmental Management at the laundry will be evaluated by Higg FEM (at least Level 1 in all areas).

Bestseller prohibited the use of the chemicals and processes above and verified this through the EIM (Environmental Impact Measuring) software.

Bestseller prohibited the use of conventional electroplating, by using trims without electroplating.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by either Organic blend/content standard or Global Organic Textile Standard (GOTS), certified fibre from yarn mill, or branded fibre from Lenzing.

Bestseller sourced cellulose-based fibres from organic methods and verified this through Organic blend/content standard or Global Organic Textile Standard (GOTS), certified fibre from yarn mill, or branded fiber from Lenzing.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

Blue of a Kind

Headquarters
Milan, Italy

Website
https://www.blueofakind.com/

Product launch
May 2021

Category

Organisation description

Blue of a Kind is an Italian fashion studio focusing on sustainability. The company has embedded the values of circular economy and up-cycling in its very founding principles: everything used in its production process comes from existing garments or fabrics.

We are delighted to join forces with the Ellen MacArthur Foundation in the challenge to promote a cultural shift towards a more mature and conscious production mode.

Contact

Fabrizio Consoli, CEO & Founder, Blue of a Kind

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Blue of a Kind produced the total volume of jeans (in accordance with the Guidelines) initially committed to by May 2021. Volumes have been submitted to the Foundation only. Blue of a Kind introduced a line of products named "leftover", meant to follow Jeans Redesign principles. This line is still on sale on the wholesale channel, and the company is waiting to raise enough orders to put it efficiently into production. The fabrics used for this collection come from Candiani Denim. Candiani has a certain amount of fabrics which for different reasons are marked as second choice (usually with minor defects) or leftover - meaning remaining meters from bigger productions or articles they no longer keep in stock.

Along the line of Blue of a Kind's mission to work only with existing products, they produce garments starting with such fabrics. Such part of their collection is consistent with the overall concept of upcycling, and in order to differentiate it from their regular post-consumer garments-based line, they named it "leftover". Furthermore, in order to leverage the collaboration with The Jeans Redesign project, Blue of a Kind is about to launch two specific products, named Amsterdam and Venezia. These two products will initially be available only on their direct shop. In this regard, in order to reduce waste, they have been able to develop a specific technique that allows garments to be crafted in a very short time-span, so as to virtually put garments into production only when order has effectively been received.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Blue of a Kind's minimum test standard for jeans, which is:

- Jeans will need to keep shape and general appearance, outside as well as inside, with regard to embellishment included (e.g. internal waistband). Fading in colour and fraying on the hems, as in line with the brand's philosophy, will be considered part of the beauty of the garments.
- Fabric abrasion resistance test AATCC 008.

Aimed to verify this through a communication by their fabric supplier partner.

Blue of a Kind tested jeans for 30 home laundries and performed two durability tests, as stated above, to meet their minimum test standard for jeans, verified through a communication by their fabric supplier partner.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to line dry
- Instructions to avoid tumble drying

Aimed to verify this by: Care Label attached to the front left side of the jeans, right below waistband.

Blue of a Kind included an easily accessible label with the information stated above, verified by inside care label.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to make their entire relevant production out of rigid fabrics, exclusively made of cotton.

Blue of a Kind ensured material composition met a 98% cellulosic minimum and verified this by fabric supplier certification and invoices. Almost the entire production focuses on rigid leftover fabrics, exclusively made of cotton. Where different materials are present, they reach 2% maximum of the composition.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The Jeans will NOT include metal rivets, RFID tags or back-patch. Blue of a Kind confirms that unstitching is the only process needed to disassemble the garments.

Blue of a Kind confirms that the only non-cotton parts on their Jeans Redesign products are buttons and zip-flies. However, as they were not satisfied yet with the easy removable buttons (they are very easy to remove but complicated to apply), they still applied traditional buttons while carrying out new tests. Blue of a Kind confirms that these, together with zip-flies, are 100% nickel free. They are also working on a simplified disassembly process for the garment itself for end-of-life disposal. They have developed a recycled cotton back-patch.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum. Complete absence of metal rivets.

Blue of a Kind ensured metal rivets were removed entirely. They have been compliant since the foundation of the company as they have never used any. Instead, they use high-resistance stitching.

d. Use The Jeans Redesign logo

Did not aim to use The Jeans Redesign logo.

However, they plan to insert it in their website to highlight the relevant products, and consider adding it inside the physical products in the future.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Blue of a Kind aimed to verify this through the ZDHC Gateway.

Blue of a Kind ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through their partners (Candiani and Officina +39) who selected products that are ZDHC certified.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by requesting relevant certification by the facilities that will be included in the manufacturing process.

Blue of a Kind prohibited the use of the chemicals and processes above and verified this through certification provided by manufacturing facilities partners.

Blue of a Kind prohibited the use of conventional electroplating, and complied with this by applying exclusively nickel-free metal parts.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this through the use of their relevant production. Jeans will be manufactured with almost entirely dead-stock and faulty 100% Global Organic Textiles Standard (GOTS) certified cotton garments.

Blue of a Kind sourced cellulose-based fibres from organic sources and verified this through the Global Organic Textiles Standard (GOTS). In particular, these fabrics are 100% cotton leftover fabrics and they are sourced from the company's fabric mill partner (Candiani).

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

Boyish Jeans

Headquarters
Los Angeles, California, United States

Product launch
January 2020

Website
https://www.boyish.com/

Category

Organisation description

Eco-friendly vintage inspired denim. The only impact we'll leave on the planet is good jeans. Boyish Jeans is a collection of sustainable women's denim founded by California native, Jordan Nodarse. Designed in Los Angeles, each collection is centred on vintage silhouettes with a modern update, all available at an attainable price point. Inspired by the stylish women who often describe their personal style as "Boyish," the brand utilises men's fabrics and fits, tailored for a woman's body when creating all collections. Boyish focuses on product quality, fit, and authentic washes to create styles reminiscent of your favourite pair of vintage jeans with an updated, fresh design and feminine fit. At the core of all Boyish collections lies a deep commitment to leaving as little impact on the earth as possible.

Therefore, Boyish utilises ethical and sustainable practices when developing and manufacturing its products. All jeans are produced with sustainable fabrics through a completely environmentally-friendly and cruelty-free process. "We are very excited to work alongside the Ellen MacArthur Foundation because fashion is extremely wasteful, from disposing of old products to the whole supply chain, so we try to do our part to be as thoughtful as possible in every aspect of our operations. We will offer our new products with the Guidelines the Ellen MacArthur Foundation put together in Spring of 2020 in both our US and European wholesale accounts."

Contact

Jordan Nodarse, Creative Director, Boyish Jeans

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Boyish exceeded their initial commitment and produced 100% of their jeans portfolio in accordance with the Guidelines by May 2021. Volumes have been submitted to the Foundation only.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 50+ home laundries and retain their ability to meet Boyish's minimum test standard for jeans, which is:

- Appearance CA-TM 02
- Dimensional stability ISO 6330 (as part of CA TM 02)
- Tensile force ISO 139342
- Seam force ISO 13935-2
- Abrasion ISO 12947-2

Aimed to verify this through BACL testing.

Boyish did not meet their aim to exceed the minimum requirement, but ensured their jeans are able to withstand 30 home laundries. However, they did not perform five durability tests (as stated above) to meet their minimum test standard for jeans. Boyish used 14oz organic cotton fabric with no stretch, reinforced with TENCEL™ Lyocell, that makes the colour last longer and also the strength of the garment hold up better through wearing and washing.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this through BACL testing.

Boyish included an easily accessible label with information on how to care for jeans. In particular, they included the following information:

- Machine wash cold with like colours.
- Do not use bleach.
- Do not tumble dry.
- Hang dry / warm iron if needed.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to use 100% natural and recyclable fibres, without any fossil-based feedstock content.

Boyish exceeded a material composition of 98% cellulosic minimum and ensured a material composition of 100% cellulose-based fibres. This was verified by using the following material compositions:

- 60% OCS Certified Organic Cotton / 40% TENCEL™ Lyocell
- 43% GRS Certified Recycled Cotton / 40% TENCEL™ x REFIBRA™ Lyocell / 17% OCS Certified Organic Cotton.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. Aimed to include only woven labels which are easy to remove by trimming labels off.

Boyish ensured any additional materials added to the fabric were easy to disassemble, since no other materials were added.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Boyish ensured metal rivets were reduced to a minimum, by using donut style rivet that are easier to remove.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Boyish ensured The Jeans Redesign logo was used on their website only.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Boyish aimed to verify this through the ZDHC Gateway.

Boyish ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through OekoTex certification, which is accepted as an equivalent to ZDHC Level 1 according to the latest version of the document "ZDHC Accepted* Conformance Indicators for Verification Against the ZDHC Manufacturing Restricted Substances List (ZDHC MRSL)".

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this through their EIM (Environmental Impact Measuring) software score, as well as OekoTex and Global Organic Textile Standard (GOTS) certifications.

Boyish prohibited the use of the chemicals and processes above and verified this through their EIM (Environmental Impact Measuring) software score, as well as OekoTex and Global Organic Textile Standard (GOTS) certifications.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this through the supplier Lenzing for Refibra lyocell, and the Organic Content Standard (OCS) for organic cotton.

Boyish sourced cellulose-based fibres from organic methods and verified this through the supplier Lenzing for Refibra lyocell, and the Organic Content Standard (OCS) for organic cotton.

d. Include post-consumer recycled content

Aimed to include 43% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this through the Global Recycled Standard (GRS) and BACL.

Boyish included 43% recycled content on average (by weight) of the total fabric composition, including a blend of post-consumer and pre-consumer recycled content. Aimed to verify this through the Global Recycled Standard (GRS) and BACL.

C&A

Headquarters
Vilvoorde, Belgium

Website
https://www.c-and-a.com/

Product launch
May 2021

Category

Organisation description

C&A has been a pioneer in developing and marketing fashion that is truly designed for circularity. In 2017, C&A launched the world's first Gold level Cradle to Cradle Certified® garment - a T-shirt and in 2018, the world's most sustainable jeans were unveiled – Cradle to Cradle Certified® Gold jeans. This was a pioneering achievement, for C&A and a milestone moment in the fashion industry. Meanwhile, we have brought to market almost 4 million pieces of this revolutionary apparel in all areas, men, women, children and babies. Through Fashion For Good we have shared our open-source Bill of Materials and Lessons Learned to give every producer, brand or retailer the information, advice and boost they need to make their products and production processes circular as swiftly and efficiently as possible. We want to move the industry to a circular model – but we cannot do it alone.

We will continue our efforts to bring more products to market but are delighted to see so many other organisations join this vision of designing products for circularity so we can reach scale collectively. "We want to evolve the apparel industry to a future where every material is used and reused safely, where ecosystems are protected and where people are provided with dignified work. This means making products that are 'made for their next use' and where we no longer talk about 'end of life'. We are delighted to see that the lessons we have learned and shared while developing the world's first world's first Cradle to Cradle Certified® Gold garments have built the base for The Jeans Redesign."

Contact

Charline Ducas, Leader Global Circular Economy, C&A

JEANS PRODUCED ACCORDING TO THE GUIDELINES

C&A exceeded their initial commitment and produced more jeans (in accordance with the Guidelines) than they originally aimed to by May 2021. Volumes have been submitted to the Foundation only. While these volumes are all secured, part of these pieces numbers are still yet to be delivered, as the company has experienced delays on some orders due to Covid-19.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet C&A's minimum test standard for jeans, which is:

- Appearance: CA-TM 02
- Dimensional stability ISO 6330 (as part of CA TM 02)
- Tensile force ISO 139342
- Seam force ISO 13935-2
- Abrasion ISO 12947-2

Did not aim to verify this through a third party verification.

C&A tested jeans for 30 home laundries and performed five durability tests (appearance, dimensional stability, tensile force, tear force, seam force and abrasion) to meet their minimum test standard for jeans. Home laundries have been carried out as per the care label wash instructions.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by adding this information as part of the product's care instruction.

C&A included an easily accessible label with the information stated above, verified by producing jeans in accordance with the guidelines with easily accessible label that include all the required information.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by material composition and Cradle to Cradle Certified® Product Standard at the Gold level.

C&A ensured material composition met a 98% cellulosic minimum. In particular all denim has been made of 98% organic cotton and 2% Lycra. All components, including sewing thread and pocket lining, are made of organic cotton.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The jeans will include metal trims and C&A confirms it is easy to remove by cutting out.

C&A ensured any additional materials added were easy to disassemble. In particular, the only additional material that was added to the fabric were buttons, and C&A confirms these are easy to remove by cutting out.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

C&A ensured metal rivets were removed entirely. They were replaced by special stitching made with cotton sewing thread.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

C&A ensured Jeans Redesign logo was used, by using in the products.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. C&A aimed to verify this through Cradle to Cradle Certified® (C2C Certified®) Product Standard at the Gold level.

C&A exceeded their aim and ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through C2C Certified® Platinum level for material health and ZDHC level 2.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by Cradle to Cradle Certified® (C2C Certified®) Product Standard at the Gold level.

C&A prohibited the use of the chemicals and processes listed above by using only C2C Certified® assessed chemicals and processes. This was required in order to ensure jeans complied with C2C Certified® Product Standard at the Gold level.

C&A prohibited the use of conventional electroplating by avoiding metal rivets and using only C2C Certified® assessed buttons, where conventional electroplating is replaced by eco-finishing. This was required in order to ensure jeans complied with C2C Certified® Product Standard at the Gold level.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS) Certification.

C&A sourced cellulose-based fibres from organic methods by using Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) certified cotton for all components including fabric, pocket lining, sewing thread.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. C&A did not aim to include post-consumer recycled content in Jeans Redesign products as, to comply with the C2C Certified® Product standard, the focus was put on ensuring all cotton was sourced from organic farming.

DL1961 Premium Denim Inc

Headquarters
New York, New York, United States

Website
https://www.dl1961.com/

Product launch
May 2021

Category

Organisation description

Since the brand inception DL1961 has a legacy of providing most comfortable jeans with sustainability. We are at the forefront of sustainability by using eco-friendly raw materials and processes like ozone, laser, green chemicals, recycled water, eco-friendly fibers like recycled cotton, recycled polyester, organic cotton and sustainable viscose. Our manufacturing facility has onsite energy generation through solar that helps us offset our carbon footprint. Water treatment and recycling is done to maintain quality and cleanliness to the environment. Working with Ellen MacArthur Foundation is an opportunity for us to contribute more towards circular economy; our passion for sustainability resonates and weaves in well with The Jeans Redesign project guidelines.

Contact

Mrs Maliha Faisal, President, DL1961 Premium Denim Inc

JEANS PRODUCED ACCORDING TO THE GUIDELINES

DL1961 produced 1% of the total volume of jeans (in accordance with the Guidelines) initially aimed to by May 2021. Volumes have been submitted to the Foundation only. This was due to challenges caused by limited supply and prices of organic and other regenerative fibers. On the other hand, DL1961 reported learnings to be the adaptation of eco-friendly processes like removing pumice stones with synthetic/fiber stones or enzymes, changing potassium permanganate to laser, and investing in aniline free dyes. They are adapting The Jeans Redesign guidelines step by step and informing customers about their sustainable practices.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet DL1961's minimum test standard for jeans, which is:

- Colour Fastness to Washing ISO 105-C06
- Colour Fastness to Rubbing ISO 105-X12
- Tear Force ISO 13937-1
- Tear Force(Tongue) ISO 13937-2
- Tensile Strength (Grab) ISO 13937-2
- Seam Slippage ISO 13936-1
- Seam Strength 13935-2
- Pilling Resistance IDO 12945-2
- Fabric Weight ISO 12127-1
- Elastic Behavior ISO 14704-1 Method A
- pH ISO 3071
- Stretch and Recovery ASTM D 3107
- Domestic Washing and Drying Cycle ISO

Aimed to verify this by SGS and/or Intertek testing on methods

DL1961 tested jeans for 30 home laundries and performed 13 durability tests to meet their minimum test standard for jeans, verified by SGS and/or Intertek. They have verified this internally in their lab and will proceed with third party testing before shipment, as the orders are still in production at the time of writing.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Wash inside out
- Wash with like colour

Aimed to verify this by the presence of a care label attached to the garment. Instructions will remain visible after 30 home laundries.

DL1961 included an easily accessible label with the updated information stated below.

CARE INSTRUCTIONS:

- Natural Indigo dye used in this garment may rub off on light colored items
- Wash separately
- Wash at 30 degree temperature
- Dry vertically

CARE SYMBOLS:

- Wash at 30 degree temperature
- Do not bleach
- Medium temperature iron when needed
- Dry clean, Any solvent except trichloroethylene
- Drip Dry

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by content analysis testing method through SGS and/or Intertek.

DL1961 ensured material composition met a 98% cellulosic minimum and verified this by content analysis testing through SGS and/or Intertek. Content analysis testing was performed by their lab.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The Jeans will include metal trims and DL1961 confirms it is easy to remove by cutting out.

DL1961 exceeded their aim and ensured jeans included screw shank buttons which are easily removed by opening screws.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

DL1961 exceeded their aim and ensured rivets were removed completely and replaced with bartack or embroidery.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

DL1961 ensured Jeans Redesign logo was used on care labels.

e. Use technology that enables sorting

Aimed to use technology that enables sorting by exploring fiber tracing technologies for traceability.

DL1961 ensured technology that enables sorting was used by implementing a QR code on each garment for consumers to engage with the product & ultimately make it easier to recycle. Polybag and garment tags contain a QR-code with all of the information. The only difficulty faced by DL1961 to achieve this was to ensure the QR-codes are easily scan-able and do not take a longer time to scan.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. DL1961 aimed to verify this through the ZDHC Gateway.

DL1961 ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by impact scoring softwares such as EIM (Environmental Impact Measurement) software.

DL1961 prohibited the use of the chemicals and processes above and verified this through:

a. Sourcing accessories that are free of conventional electroplating
b. Replacing potassium permanganate with laser dry processing
c. Replacing stone finishing with enzyme finishing or synthetic plastic stones.
d. Never using sand blasting.

In addition, the impact score for Jeans Redesign products on EIM (Environmental Impact Measurance) software was "LOW".

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS) Transition Certificate for Organic Cotton products.

DL1961 sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS) Transition Certificate for Organic Cotton products.

d. Include post-consumer recycled content

Aimed to include 5-20 % post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by Global Recycled Standard (GRS) and/or Recycle Claim Standard (RCS).

DL1961 did not include 5-20 % post-consumer recycled content (by weight) and did not verify this through Global Recycled Standard (GRS) and/or Recycle Claim Standard (RCS). However, if they will use PCRC fabric in the future, that percentage would be 5%.

Fairblue Jeans

Headquarters
Paris, France

Website
https://fairbluejeans.com/en

Product launch
December 2019

Category

Organisation description

Fairblue Jeans is a French company that is proud to present the largest range of 100% Green Jeans ever imagined! Today, to produce this essential piece of clothing in our wardrobe, the numbers speak for themselves: it will create minimum 10,000 litres of polluted water to make even one pair of jeans! An astronomical quantity of water that has become blue, toxic, not very recyclable and that will often be discharged into the watercourses near the factories. Every month, billions of cubic meters of polluted water are found in our lands and water sources, making humans and animals sick. Faced with such an ecological catastrophe, it is necessary, at a given moment, to say stop. Fairblue Jeans decided to say stop. After a lot of research on the most advanced techniques available today on the ecological and responsible design of jeans, Fairblue exploits them all in order to offer you the cleanest possible jeans. Fairblue offers denim, raw material of jeans, made exclusively from organic cotton with GOTS label from CANDIANI in Italy. Fairblue favors Laser, allowing a reduction of use of 97.4% of water and 80% of chemicals. Not to mention that this technique gives the jeans a choice of styles infinitely more precise, we wash only in a ZDHC compound. Fairblue prohibits any product from animals.

Leather inserts adorning jeans are made from pineapple and corn, it's vegetable leather! Fairblue is committed to ecology down to the smallest detail: all labels, pockets, accessories and other attributes will be recycled. The jeans will be delivered in a 100% vegetable and compostable packaging! Fairblue is fully made in Italy: from denim material CANDIANI, cut & sew, washing, accessories. On our own, we approached ViJi *, a 100% French company bringing together a number of experts in the field of ecology. This is to control and certify our sourcing from harvest to packing, to show off all ecology lovers like Fairblue. Everybody thinks today more or less Green, still it is necessary to prove it. A module will be affixed to each of our jeans. Being green does not exclude the lack of taste. Fans and lovers of quality jeans can only appreciate the tip of the trend that our jeans offer. Entirely made in Italy, our creations will be to the tastes of all. We do not sacrifice the look or the quality. Everything is reflected in the name and the very identity of the brand: "Fair" comes from English meaning fair, honest, beautiful. "Blue" means our blue jeans, a must-have piece of any wardrobe. In short, if we want, we can. At Fairblue Jeans we want and we can!

Contact

Guy Cohen Solal, CEO, Fairblue Jeans

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Fairblue exceeded their initial commitment and produced 100% of their jeans portfolio in accordance with the Guidelines by May 2021. Volumes have been submitted to the Foundation only. Since before joining The Jeans Redesign, Fairblue Jeans has produced according to the most sustainable existing process, technically speaking.

This means that their original and internal conditions of production were not less stringent than The Jeans Redesign requirements. Fairblue Jeans reported it was hard to find suppliers matching with their conditions but they did not produce even one piece before they matched The Jeans Redesign requirements.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 35 home laundries and retain their ability to meet Fairblue Jeans' minimum test standard for jeans, which is:

- Stability ISO 6330:2012(E)
- Appearance ISO 6330:2012
- Fade test
- Color fastness to washing ISO 6330/ 2012
- Color fastness to friction ISO 12947-2&4
- Resistance of seams X 3 : ISO13935-1 : 2014
- Abrasion resistance (10,000 cycles) ISO 12947-2&4
- Tear resistance initiated ISO 13937-1: 2000
- Color fastness to Washing ISO 105 C06: 2010

Aimed to verify this by lab test performed by SGS and/or Intertek.

Fairblue Jeans exceeded this Jeans Redesign requirement and tested jeans for 35 home laundries and performed nine durability tests as stated above. Fairblue Jeans verified this by buying only high quality and heavy denim qualities from CANDIANI in Italy, only made with cotton label Global Organic Textiles Standard (GOTS), and washing without water in smooth laser or ozone. As a consequence, the jeans are definitely strong because the yarn gauge is strong and the washing process is smooth.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Line dry
- Donate or recycle

Aimed to verify this by SGS and/or Intertek.

Fairblue Jeans included an easily accessible label with the information stated above, verified by all the jeans do have all those above information on an inside label, and even more information.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by lab test performed by SGS and/or Intertek.

Fairblue Jeans exceeded a material composition of 98% cellulosic minimum and ensured a material composition of 100% cellulose-based fibres by making all men jeans with 100% cotton Global Organic Textile Standard (GOTS). All their ladies jeans are made with 98% cotton GOTS and 2% recycled elastane.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The jeans will not include any material or technology.

Fairblue Jeans ensured additional materials added to the fabric were easy to disassemble. This was ensured by not including any additional material to the fabric, other than the rivets.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely.

Fairblue Jeans did not remove rivets entirely, but ensured metal rivets were removed to a minimum.

d. Use The Jeans Redesign logo

Did not aim to use The Jeans Redesign logo.

e. Use technology that enables sorting

Aimed to use technology that enables sorting. The objective of ViJi is to trace the production cycle in order to fulfill two objectives: to support brands in their approach of transparency and traceability, and to give ethical decision-making elements to consumers through indicators on the social and environmental conditions of production. Thanks to the cross-fertilization of supplier, brand, and trusted third party data (certifying bodies, control offices, auditors, NGOs, associations, etc.), the ViJi system enables federating all the players in the textile and clothing sector and reinforces traceability and the reliability of the information listed on the supply chain of a given garment. This information is stored, secured and transmitted to you in the most educational way so that you can choose your clothes in your soul and conscience.

Fairblue Jeans did not ensure technology that enables sorting was used because they preferred to focus their efforts on decreasing water consumption and chemical products used.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Fairblue Jeans aimed to verify this through ITACLAB, who conforms with the ZDHC MRSL Level 1.

Fairblue Jeans ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the dyeing factory CANDIANI in Italy and the washing factory in Italy.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by ITACLAB.

Fairblue Jeans prohibited the use of the chemicals and processes above and verified this through their fabric supplier (Candiani Denim).

Fairblue Jeans prohibited the use of conventional electroplating, replacing it with rivets made with stainless steel without any kind of finishing.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by using only Global Organic Textile Standard (GOTS) Cotton for jeans and pockets.

Fairblue Jeans sourced cellulose-based fibres from organic methods and verified this through only using cotton with Global Organic Textile Standard (GOTS) label.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. However, they are in contact with another Italian denim supplier that will supply this in the future.

FRAME

Headquarters
Los Angeles, California, United States

Website
https://frame-store.com/

Product launch
April 2021

Category

Organisation description

FRAME is an American fashion brand renowned for its collections in denim, cotton, leather, and cashmere. The company's founders Erik Torstensson and Jens Grede strive to design a modern versatile wardrobe through signature denim fits, cotton shirting and coveted leather pieces. Since the brand's inception in 2012 in Los Angeles, California, FRAME has evolved from making handcrafted denim to offering ready-to-wear and accessory collections in the finest natural materials. FRAME is committed to sustainable and fair manufacturing practices, balancing profit with a commitment to people and planet. Today, FRAME is sold through its own retail stores and e-commerce as well as through leading department stores and boutiques across the world.

Contact

Michael Mechaly, VP of production, FRAME

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Frame produced the total volume of jeans (in accordance with the Guidelines) initially committed to by May 2021. Volumes have been submitted to the Foundation only.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Frame's minimum test standard for jeans.

Aimed to verify this by their supplier's own test and third party testing by Intertek.

Frame tested jeans for 30 home laundries and dry cycles at 41°C. Frame verified this by their supplier's own test and third party testing by Intertek.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by testing company FITI.

Frame included an easily accessible label with the information stated above, verified by testing company FITI.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by Intertek.

Frame ensured material composition met a 98% cellulosic minimum and built the textile composition of the garment (fabric and pocket lining), with 100% organic certified (GOTS and OCS) fabric, saving the remainder 2% for threads, labels, and twill tapes. This resulted in a 100% organic cotton garment with labels, twill tapes and threads being the only non-organic parts. Additionally, in trims and labels they are utilizing tapes composed of partially recycled fibers.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

Frame ensured any additional materials added to the fabric were easy to disassemble. In particular, buttons were made of raw metal and engineered to be easily removed.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Frame ensured metal rivets were removed. They replaced them with embroidered rivets.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Frame ensured Jeans Redesign logo was used as part of the hangtag and the main label sewn in the garment.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Frame aimed to verify this through the ZDHC gateway.

Frame ensured jeans use chemicals that comply with Level 1, ZDHC MRSL. Absolutely every chemical used in the making of the garments is bought with either Global Organic Textile Standard (GOTS) or OEKO-TEX certificates from suppliers (or other tests that comply with Level 1 of ZDHC MRSL, such as Intertek lab analysis), this was verified with scopes certificates and with ZDHC Gateway tool.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by Intertek.

Frame prohibited the use of potassium permanganate, stone finishing, and sand blasting and verified this through Intertek.

Frame prohibited the use of conventional electroplating and verified this through Intertek.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Intertek.

Frame sourced cellulose-based fibres from 100% organic cotton fibers and verified this through Intertek.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

Frank And Oak

Headquarters
Montreal, Canada

Website
https://www.frankandoak.com/

Product launch
September 2021

Category

Organisation description

Combining style, design, and technology since it was founded in 2012, Frank And Oak offer collections of clothing and accessories for men and women that are thoughtfully designed and well suited to the lifestyles of its customers. Present on the web and in 23 boutiques across Canada, the brand provides a personalized online experience to hundreds of thousands of members, surpassing its role as a retailer to reinvent the customer experience. Inspired by ethical thinking and with an eye to the future, Frank And Oak upholds the values of equity, diversity and inclusion and works to promote them in its communities.

Frank And Oak is certified B Corporation®, meeting the highest standards of social and environmental performance, public transparency, and legal accountability in the industry. "As a brand, we've declared that we would strive continuously to find innovative solutions across our operations that leave a positive impact on the environment. Denim was of the first challenges we took on, and have been active in reimagining such an iconic product. Frank And Oak is proud to be part of The Jeans Redesign by the Ellen MacArthur Foundation, and we are looking forward to the positive long-term amplification this project will bring to our industry."

Contact

Melisa Alessi, Director, Sustainability and Product Development, Frank And Oak

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Frank And Oak did not meet their commitment and have not produced any jeans (in accordance with the Guidelines) by May 2021. Frank And Oak did not meet their commitment due to the Covid-19 pandemic. The logistics and the production of their denim assortment has been highly impacted by the pandemic, with a huge impact on their inventory. Now that their business is mostly back to normal, they will be able to launch their denim assortment that meets The Jeans Redesign guidelines in September 2021.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 35 home laundries and retain their ability to meet Frank And Oak's minimum test standard for jeans, which is:

- Crocking
- Abrasion resistance
- Tensile strength
- Tearing strength and seam slippage
- Pocket strength

Aimed to verify this by in-house testing for minimum laundering requirements with visual inspection of garment, as well as through accredited QA third party test labs.

Frank And Oak did not test jeans for 35 home laundries, as they have not produced any jeans yet. However, they are on track to meet this requirement for their planned September 2021 launch.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency - to be included as of FW20 collection
- Instructions to wash at low temperatures (30 degrees or below) – currently on care labels
- Instructions to avoid tumble drying – currently on care labels, instruction to line dry

Aimed to verify this by an internal approval process and indication on care label instructions and website product pages.

Frank And Oak did not include an easily accessible label with the information stated above, as they have not produced any jeans yet. However, for their planned September 2021 launch, the inside print on their pocketing will give friendly tips about denim care to their customers and their care labels specify to wash in cold water and hang dry.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by fibre composition lab test reports.

Frank And Oak did not meet 98% cellulosic minimum material composition because they have not produced any jeans yet. However, the tests are under process for their planned September 2021 launch. Only fabric with more than 98% natural fibres are tested.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. Aimed to include shanks and zippers that can be easily removed by performing mechanical cutting. Frank And Oak aims to continue research in this respect as this aspect of circularity is important and dictates their designs. The commitment to remove rivets was an effort to remove a barrier for easy recycling and they hope to innovate in solving the other pain points.

Frank And Oak did not ensure additional materials added to the fabric were easy to disassemble, as they have not produced any jeans yet.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely on their denim as of January 2020.

Frank And Oak did not ensure metal rivets were removed entirely as they have not produced any jeans yet. However, they are on track to meet this requirement for their planned September 2021 launch, since, as of Spring 2019, they removed all rivets on their denim.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Frank And Oak did not ensure Jeans Redesign logo was used as they have not produced any jeans yet. However, for their planned September 2021 launch, they will use it in the booklet applied to their Frank And Oak garment. This booklet is made of Sugar Cane paper and is biodegradable and compostable with a description at the back of how to dispose of it.

e. Use technology that enables sorting

Aimed to use technology that enables sorting, looking for a viable solution or technology to share general end-of-life solutions on their products.

Frank And Oak did not use technology that enables sorting, as they have not produced any jeans yet.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Frank And Oak aimed to verify this through the ZDHC gateway, as well as the Oeko-Tex certification.

Frank And Oak did not ensure jeans used chemicals that comply with Level 1, ZDHC MRSL and did not verify this through the ZDHC Gateway as they have not produced any jeans yet. However, the styles to be launched in September, October, and November 2021 are currently under testing.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by a declaration from manufacturer including development of product under hydroless and laser processes and sharing of wash recipes. This can also include EIM (Environmental Impact Measuring) software verification.

Frank And Oak did not prohibit electroplating, potassium permanganate, stone finishing, and sand blasting as they have not produced any jeans yet. However, the styles to be launched in September, October, and November 2021 are currently under testing, and their shanks are finished with eco-finishes.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by accredited certifications such as Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS) for organic cotton and Lenzing certification. They currently prioritize recycled cotton and also use organic cotton, linen and hemp, and Lenzing fibres (Tencel Lyocell, Tencel Modal) in their compositions.

Frank And Oak did not source cellulose-based fibers from organic methods and did not verify this through third party certifications as they have not produced any jeans yet.

d. Include post-consumer recycled content

Aimed to include a minimum of 10% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by confirmation from fabric mill and/or garment manufacturer as well as the Global Recycled Standard (GRS).

Frank And Oak did not include a minimum of 10% post-consumer recycled content, as they have not produced any jeans yet. However, they use two fabrics that include 20% post-consumer recycled content.

GAP

Headquarters
San Francisco, California, United States

Website
https://www.gap.co.uk/

Product launch
March 2021

Category

Organisation description

Gap is one of the world's most iconic apparel and accessories brands known for American casual style. One of Don and Doris' founding principles when they opened the first Gap store was to "do the right thing" and this is something we continue to strive to everyday. As a global brand, we have a responsibility to take accountability for ourselves, our customers and our planet. We achieve this through our existing commitments and evolving goals in cotton, water, and our people. Through the Ellen MacArthur Foundation's Jeans Redesign initiative, we have the opportunity to push our core product further, and reimagine the denim process from end to end.

Within this challenge, we want to find ways to reduce our carbon footprint each step of the way – from where the material is being sourced to how the garment is produced and ensuring it is fit for recycling. By bringing this product to life, we are able to test how the customer responds to the product, what we can do to keep delivering, and share that learning with the industry. "At Gap, denim is in our DNA and as we mark our 50th year, we see it as both our heritage and our future. To honour our past while upholding our responsibility to our planet and customers, we look forward to the challenge of reimagining the denim process from end to end and working to create a positive impact each step of the way, both environmentally and socially."

Contact

Michele Sizemore, SVP of Production, GAP

JEANS PRODUCED ACCORDING TO THE GUIDELINES

GAP produced 93% of the total volume of jeans (in accordance with the Guidelines) initially aimed to by May 2021. Volumes have been submitted to the Foundation only. This was due to moving from six to five styles as the jacket was made unisex eliminating one style. The decision to drop from six to five styles resulted from a conscious choice to be more gender-inclusive with this line, which is another priority for the brand.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet GAP's minimum test standard for jeans, which is:

- Tearing Strength: ASTM D2262-2017
- Tensile Strength: ASTM D50342009 (2013)

GAP tested jeans for 30 home laundries and performed two durability tests (Tearing Strength and Tensile Strength) to meet their minimum test standard for jeans. Testing was performed on fabric and finished garments of multiple wash shades. Testing was completed by Bureau Veritas, an independent lab, referencing Gap Inc.'s Quality standards.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees of below)
- Instructions to avoid tumble drying

Aimed to verify this by the presence of a care label on the product.

GAP included an easily accessible label on the pocket bag/back of neck label with the following information: HOW CAN YOU HELP? WASH LESS. WASH COLD. SKIP THE DRYER. LEARN MORE ABOUT OUR SUSTAINABILITY PROGRAM AT GAP. COM/GAPFORGOOD. The label was sewn into every piece produced for this collection, and is clearly visible to the customer.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by fibre composition disclosed on Care and Content label.

GAP exceeded a material composition of 98% cellulosic minimum and ensured a material composition of 100% cellulose-based fibres, verified by fibre composition disclosed on Care and Content label. After reviewing a number of options, the team chose to add Belgian hemp to the fabric, which involved a new supplier relationship through the fabric mill. The composition of the fabric was therefore 82% organic cotton, 6% recycled cotton, 12% hemp. In addition, GAP ensured the sewing thread was 100% cellulose based to facilitate recycling.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The Jeans will include trims and GAP confirms it is easy to remove by pre-processing for recycling.

GAP ensured any additional materials added to the fabric were easy to disassemble. In particular, the zipper was not used and the button fly uses screw-off removable shanks. GAP ensured this by reviewing samples and selecting each trim used for the collection.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

GAP ensured metal rivets were removed entirely. Instead of rivets, bar tacks were used to reinforce the garment where necessary to ensure strength and durability. GAP reported that the use of bar tacks was relatively easy.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

GAP ensured Jeans Redesign logo was used on the interior pocket bag/back of neck label.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. GAP aimed to verify this through the ZDHC Gateway.

GAP ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway and confirmed by supplier use of CleanChain platform.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by the use of the ZDHC Gateway, Jeanologia EIM system and GAP Inc. Sand Blasting Policy, which bans sand blasting.

GAP prohibited the use of the chemicals and processes above and verified this through the use of the ZDHC Gateway, CleanChain, Jeanologia EIM system, and GAP Inc. Sand Blasting Policy, which bans sand blasting. Denim washes were formulated to achieve the desired aesthetic effects while avoiding chemicals and processes restricted by the Guidelines. Metal hardware was chosen that did not use conventional electroplating, which is now Gap's standard specification for metal hardware.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by use of certified organic fibres (Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS).

GAP sourced cellulose-based fibres from organic methods and verified this through the Global Organic Textile Standard (GOTS) for the organic cotton. This included pocketing and back of neck label fabric. Certified organic cotton added to the cost of materials, but was available commercially. Regarding hemp, a certification was not available, but GAP's mill arranged for them to speak directly with the hemp supplier to understand their growing and manufacturing process. They offered a report showing how their hemp is grown without synthetic fertilizers or pesticides, after which the fibre is field retted without the use of chemicals.

d. Include post-consumer recycled content

Aimed to include 5% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition, and to verify this by use of certified recycled fibres (Global Recycled Standard (GRS) or Recycled Claim Standard (RCS)).

GAP included 5% post-consumer recycled cotton (by weight) of the total fabric composition. This has been verified by use of certified recycled fibers (Recycled Claim Standard (RCS)). GAP had been using 5% post-consumer recycled cotton in its denim for several seasons, so readily incorporated this fiber.

GUESS?

Headquarters
Los Angeles, California, United States

Website
https://www.guess.com/

Product launch
May 2020 (Wholesale), June 2021 (Retail)

Category

Organisation description

GUESS? is proud to join the Ellen MacArthur Foundation, The Jeans Redesign programme and the Make Fashion Circular initiative. To develop the initial Jeans Redesign concept, GUESS? partnered with the Fashion Institute of Design and Merchandising (FIDM), where GUESS? has sponsored a sustainability class since 2016.

Other GUESS? initiatives to promote circular fashion include RESOURCED, its customer take back programme and GUESS? Vintage, its curated collection of second-hand clothing.

The Brand's new sustainability plan, VISION GUESS, was announced in June 2021 and includes ambitious goals that include growing its circular products and business, as well as science-based targets for GHG emissions reduction.

Contact

Jaclyn Allen, Director of Corporate Sustainability, GUESS?, Inc.

JEANS PRODUCED ACCORDING TO THE GUIDELINES

GUESS? produced 29% of the total volume of jeans (in accordance with the Guidelines) initially aimed to by May 2021. Volumes have been submitted to the Foundation only. Jeans developed according to the Jeans Redesign guidelines will be in store in Europe starting June 2021 (four styles), and will be available in ten styles globally during the Fall and Holiday 2021. GUESS? experienced several COVID-related challenges during the product development and sampling process, which accounts for the delay of the product launch from May to June. While GUESS?'s denim will be in stores starting from June 2021, they did have it on the market for their wholesale customers starting from May 2020.

When COVID-related delays, facility closures, and volume reductions are taken into account, GUESS? would have achieved nearly 100% of its initial goal as committed in 2019.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet GUESS?'s minimum test standard for jeans. Tests that may be conducted include Abrasion Resistance, After-wash Appearance, and Colour Fastness. Aimed to verify this by either conducting the wash testing in-house or contract a third party lab to conducting these tests for them. GUESS? works with several third party labs including BV, UL, SGS and Fiti. The vendor GUESS? choose for the testing will depend on availability and pricing.

GUESS? tested jeans for 30 home laundries and performed five durability tests (tear strength, tensile strength, appearance after washing, antibacterial finish, microscopical analysis) to meet their minimum test standard for jeans. GUESS? verified this by engaging with UL on testing for Tear Strength (ISO 139371:2000 with Corr. 1), Tensile Strength (ISO 139341:2013), Appearance after Washing (ISO 15487:2018), Antibacterial Finish (AATCC 100) and Microscopical analysis.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Care Instruction Labels are created in-house by GUESS?. GUESS? aimed to contract a third party lab to verify information on labels.

GUESS? included an easily accessible label with the information stated above, by printing on the internal lining of the garment and on dedicated hangtags. This was verified by UL Testing Lab.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by a third party lab.

GUESS? ensured material composition met a 98% cellulosic minimum and verified this by UL Testing Lab.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The Jeans may include screw back tack buttons or double shank tack buttons and GUESS? confirms these are easy to remove by performing the following: unscrewing the screw back tack buttons or popping out the double shank tack buttons.

GUESS? ensured additional materials added to the fabric were easy to disassemble. When GUESS? first endeavored on this project, they opted for 100% renewable and natural materials (Corozo buttons and 100% organic cotton). Corozo is made from the seed of a tropical palm, a species scientifically known as phytelephas macrocarpas, and is sourced from ACM SRL. Corozo is sustainably harvested and is made up of very tightly wound fibres which give buttons excellent durability and scratch resistance. However, when the first styles underperformed with their wholesale customer, they added minimum amounts of non-cellulosic components, such as removable metal buttons, in order to have a more authentic denim look - which will be available starting pre-Spring 22 on the retail market.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

GUESS? ensured metal rivets were removed entirely by eliminating all metal from the garments. In particular GUESS? used both “classic” and “rounded” embroidered bar-tacks which reproduce the shape of the rivet.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

GUESS? ensured The Jeans Redesign logo was used, by printing it on the linings and on hangtags.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. GUESS? aimed to verify this through the ZDHC Gateway.

GUESS? ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway. Both laundry and mill are compliant with ZDHC Level 1.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by a third party lab.

GUESS? prohibited the use of the chemicals and processes above. None of these processes were used nor needed for this style, and produced in accordance with both the ZDHC MRSL and GUESS?'s LRSM. The supplier and mill, Raymond and Everblue Apparel in India, are trusted partners and renowned for their state of the art technology and sustainable practices. Raymond is an affiliate partner of ZDHC.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by requesting applicable certifications such as Organic Content Standard (OCS) certificates for organic fabrics.

GUESS? sourced cellulose-based fibres from organic methods and verified this through Organic Content Standard (OCS) certification. GUESS? received scope certificates from their vendor Raymond as certified by Control Union, with transaction certificates required with delivery.

d. Include post-consumer recycled content

Aimed to include up to 30% pre- or post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by a third party lab.

GUESS? did not include any pre- or post-consumer recycled content in Jeans Redesign products. However, in its eco SMART GUESS denim collection, GUESS? uses post- and pre- consumer recycled content, and upward of 90% in its GUESS? Denim Reborne styles.

H&M

Headquarters
Stockholm, Sweden

Website
https://www.hm.com/

Product launch
October 2020

Category

Organisation description

H&M Group is part of The Jeans Redesign through two of its brands, H&M and Weekday. They are developing different denim products for this project having the customers' needs and the circular economy principles in mind. H&M's and Weekday's design teams will use as much textile waste as possible, such as collected garments or production left-overs. The products are designed to last for a long time, and to be easily recycled. For H&M Group, this project is the next step in its work to apply circular economy principles into its business - from the design stage, to when the product reaches customers and eventually also when being recycled.

The learnings from this project will help the different teams across the organisation to implement circularity in the production process on a bigger scale. "These are exciting times for the fashion industry. H&M Group is re-thinking every step to use natural resources in a smart way and to minimise waste. The Jeans Redesign by the Ellen MacArthur Foundation is a great opportunity for us to challenge the way jeans are designed, a garment that can be found in everyone's wardrobe."

Contact

Cecilia Brännsten, Head of Environmental Sustainability, H&M Group

JEANS PRODUCED ACCORDING TO THE GUIDELINES

H&M produced 50% of the total volume of jeans (in accordance with the Guidelines) initially aimed to by May 2021. Volumes have been submitted to the Foundation only. Due to production disturbances related to the pandemic, overall volumes and number of articles needed to be lowered. Overall, this was a pilot project to test, learn and see how H&M could use those learnings throughout their assortment, so the total quantity was not the main goal. One major challenge for H&M to increase scale lies in the use of organic cotton of which there are limited volumes today. Going ahead they will look further into working with in-conversion cotton, as well as cotton alternatives, to enable further scaling.

Increasing the share of recycled content has also been a strong focus for H&M, and each product contained between 29-35% post-consumer recycled cotton. H&M is rapidly increasing the share of recycled content across their main lines as well. H&M have been using many of the learnings from The Jeans Redesign to inform and support the development of an internal guideline for circular product design that can be used across the full assortment. The aim is to train all their teams in circular design and further develop tools to support their progress.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet H&M's minimum test standard for jeans, which is:

- 30 degree Celsius temperature and line dry method to reach 30HL
- Tensile Strength (ISO13934-2)
- Tearing (ISO13937-2)
- Dimensional stability (ISO6330)

H&M tested jeans for 30 home laundries and performed three durability tests (tensile strength, tearing, dimensional stability) to meet their minimum test standard for jeans. They verified this by performing the test at their supplier's lab. After the 30 home laundries they observed a slight fading of the indigo colour, however this is fully in line with the natural fading properties of indigo dyes.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Dark Colour Denim may transfer onto light coloured materials
- Wash with similar colours and similar material

Aimed to verify this by the durability tests mentioned, and based on customers following the care instructions.

H&M included an easily accessible label with the information stated above. To comply with this, they have used Clevercare, a worldwide logo for more sustainable textile care on the labels which is advising to wash less, at lower temperature and avoiding tumble drying. There were challenges in incorporating this guidance more explicitly on the care labels initially due to the legal need for multiple translations of the instructions which leads to extra labelling. However, after working with other teams internally and also reviewing Weekday's approach to having the instructions on the pocket bag, and capturing the translations elsewhere, they are looking into how to evolve the approach going ahead to further encourage the customer to take care of their garments.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by content analysis testing method: Deviation of fibre content ISO1833.

H&M ensured material composition met a 98% cellulosic minimum. The total weight of cellulosic fibres in the product was equal or higher than 98% including components such as pocket bags and threads. H&M used Tencel threads (cellulosic) to ensure the product will be easy to recycle after it can no longer be used. H&M faced several challenges connected to this. Removing the fusing from the waistband was considered possible for these fabrics and fits but could have negative impact on slim fits, possibly causing the jeans waistband to stretch out. H&M will continue to seek alternative solutions for slim styles. Additionally, using 100% cotton pocket bags could possibly reduce the durability and product lifespan as opposed to the "conventional" cotton/poly blends used for pocket bags. A potential solution to this could be offering repairs for the customer. Using a 100% cellulosic sewing thread has proven to be the most challenging. To comply with this, they used a Tencel thread. This led to a reduction of the production speed as the Tencel was not compatible with regular machine speed, thus needing to reduce the m/c RPM to avoid thread breakages. At the washing side they used shorter washing time and they also reduced the washing temperature to maintain the strength of the Tencel thread.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. Aimed to include metal trims and H&M confirms they are easy to remove. To ensure this, they partner with I:Collect and Re:newcell, and rely on their existing technology to remove and collect metal trims for recycling. H&M also collaborates with YKK to develop durable metal trims (rivets and buttons) with decreased metal weight and minimised use of mixed metal types and plating to increase their recyclability.

H&M ensured additional materials added to the fabric were easy to disassemble industrially and at scale. They worked on this through dialogue and site visits with their partner I:Collect who they are collaborating with for their in-store garment collection program. Overall, they reduced the number of trims added, so there are less components that need to be removed. As I:Collect are working with garment shredding at scale, any remaining trims are removed during a stage in the shredding process, where they are separated from the textile parts, collected and then sent for further reuse and recycling.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

H&M ensured metal rivets were removed entirely, by using bar tack stitches instead. In particular, bar tack stitches were shaped as circles.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo

H&M ensured Jeans Redesign logo was used, by using the logo on the hangtags of all Jeans Redesign products.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting. However, they started to explore the use of RFID but, as they didn't have this technical solution ready yet, they were not able to implement it in this first launch.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. H&M aimed to verify this through the ZDHC Gateway.

H&M ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through ZDHC MRSL gateway Level 1 chemicals for all the washes. Some of the chemical formulations were also verified with screened chemistry methodology. By using screened chemistry, H&M ensured that they chose the best-in-class chemicals. This method is hazard-based and involves a third-party assessment that addresses environmental as well as human health hazards.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to achieve this by:

- Conventional electroplating: for this project they are only using metal trims in their natural raw metal colour. For H&M this material will be aluminium. That means that no plating (neither eco or conventional, or oxidation) is used.
- Potassium permanganate: H&M can show the wash recipe of what they are using.
- Stone finishing: H&M can show the wash recipe they are using.
- Sand blasting: H&M is since 2012 only allowing production in factories that are entirely sand blasting-free.

H&M prohibited the use of the chemicals and processes above. H&M confirmed that all above guidelines have been followed for materials, chemicals, and processes for Jeans Redesign products. In particular:

- As a replacement for potassium permanganate, H&M used Green Screen certified potassium permanganate alternative chemicals, as well as hand scraping for some of the washes. It was not challenging to get the required contrast level and whiteness as the fabrics were dyed in laser friendly way using surface dyeing, where you don't penetrate the indigo to the core of the yarn, rather you keep it on the surface so it's much easier to show the whiteness when laser is being applied on those fabrics during washing stage.
- As replacement of pumice stone washing H&M used a Green Screen certified combination of enzymes which provides a natural abrasion effect in e-flow environment.
- H&M prohibited the use of conventional electroplating, replacing it with metal buttons without electroplating.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS).

H&M sourced cellulose-based fibres from organic methods and verified this through the Global Organic Textile Standard (GOTS) certification.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content on Jeans Redesign products.

H&M included 29-35% post-consumer recycled content (by weight) and verified this through a Transaction Certificate (TC) for recycled cotton under Global Recycled Standard (GRS) scope. Increasing the share of recycled content in their collections is a strong focus for H&M, and going ahead for their main denim lines they are including a high share of post-consumer recycled content, and where that is a challenge they will use a high share of pre-consumer (or post-industrial) recycled content. This will ensure a balance between increasing the mechanically recycled content as much as possible, while still maintaining the durability of the fabric.

HNST

Headquarters
Mechelen, Belgium

Website
https://www.letsbehonest.eu/

Product launch
May 2018

Category

Organisation description

At HNST (read honest) we think that feeling good is as important as doing good. Therefore, we produce jeans with a clean conscious that have absolutely nothing to hide. The product with the lowest impact, is the one that already exists. That is why we harvest old jeans and recycle them into new fabric.

We want to change the way the textile industry currently works by raising the bar and showing it is perfectly possible to design and make premium, high-quality jeans according to circular economy principles without making any compromises on style, sustainability or quality.

Contact

Eva Engelen, Sustainability & Product Manager

JEANS PRODUCED ACCORDING TO THE GUIDELINES

HNST exceeded their initial commitment and produced 100% of their jeans portfolio in accordance with the Guidelines by May 2021. Volumes have been submitted to the Foundation only. Since launching their first collection in May 2018, all HNST jeans have been, by design, in line with The Jeans Redesign Guidelines. For HNST, circularity is at the core of every design, material and production decision.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet HNST's minimum test standard for jeans, which is:

- Abrasion – ISO 12947-1:1998
- Pilling – ISO 12945-2:2000
- Dimension stability – ISO 5077:2007
- Tear strength – ISO 13937-1:2000
- Tensile strength – ISO 13934-2:2014
- Wrinkle recover – ISO 9867:2009(E)
- Colour fastness test for washing with soap – ISO 105-C10:2006

Aimed to verify this by quality tests done by independent test and research centre.

HNST tested jeans for 30 home laundries and performed seven durability tests to meet their minimum test standard for jeans, verified by quality tests done by independent test and research centre.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees of below)
- Instructions to avoid tumble drying
- Instructions to avoid bleaching
- Instructions to avoid dry cleaning
- Instructions to use the specially developed pro-biotic spray to avoid washing

Aimed to verify this by being part of a legally required label.

HNST included the information stated above on the pocket print, which is easily accessible. Moreover, washing instructions are mentioned on the website and product pages. With each order HNST provides a pro-biotic spray to avoid washing as well as instructions on how to return the jeans when worn out, this way they can take responsibility of the garments at the end of life.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by analysis done by independent test and research centre. Intentional choice not to include elastane in the fabric blend, but to re-design the jeans.

HNST ensured material composition met a 98% cellulosic minimum and verified this by independent test and research centre. Additionally, all HNST jeans do not include elastane, instead the jeans have been re-designed to hug the body without the use of stretch.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. Aimed to do this by including removable and replaceable buttons and HNST confirms it is easy to remove by performing the following: unscrewing the button.

HNST ensured any additional materials added to the fabric were easy to disassemble. HNST achieved this by using removable and replaceable buttons and confirms it is easy to remove them by unscrewing the buttons.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely.

HNST Jeans ensured metal rivets were removed entirely by replacing them with bartacks.

d. Use The Jeans Redesign logo

Did not aim to use The Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

However, for the future, HNST Jeans is exploring fibre tracing technologies for traceability.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

HNST ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through independent lab analytics and certifications such as OEKO-TEX 100. HNST is not a contributor on ZDHC. Additionally, recycled fibres are tested in independent labs. When limit values of OEKO-TEX 100 Class II are not met, the batch of recycled content is not used for jeans. Moreover, HNST ensures its jeans are free of hazardous chemicals, which is currently verified by production guidelines in code of conduct, assessment of processes and provided MSDS of their production partners.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting
- Chlorine bleaching
- PVC free silkscreen print

Aimed to verify this by production guidelines in code of conduct, assessment of processes and provided a Material Safety Data Sheet (MSDS) of their production partners, independent lab analytics, certifications such as OEKO-TEX 100, and self-assessment through EIM (Environmental Impact Measuring) software.

HNST prohibited the use of the chemicals and processes above and verified this by production guidelines in code of conduct, assessment of processes and provided MSDS of HNST's production partners.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Global Organic Textile Standard (GOTS).

HNST Jeans sourced cellulose-based fibres from organic methods and verified this through the Organic Content Standard (OCS).

d. Include post-consumer recycled content

Aimed to include 21% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by Global Recycled Standard (GRS).

HNST jeans included 21% post-consumer recycled content (PCRC) and 35% pre-consumer recycled content on average (by weight) of the total fabric composition. This is verified by Textile Exchange Global Recycled Standard (GRS). Since the launch of the brand until today this has been valid for all HNST jeans.

ICICLE

Headquarters
Shanghai, China

Website
https://www.icicle.com.cn/en/icicle-group/

Product launch
February 2021

Category

Organisation description

Founded in Shanghai in 1997, ICICLE is a major player in the high-end ready-to-wear market (270 stores, 70 cities, 290M€ turnover) and a pioneer of natural and durable fashion. More than two decades ago, ICICLE started paving a new way for global fashion by creating a timeless wardrobe based on a high-end "Natural Way" positioning. Known for its "Natural Way" approach, ICICLE gives a modern take on the ancient philosophy of harmony between human and nature. High-quality natural fabrics, zero dye or plant-dyed garments are enhanced in a minimal and contemporary style meeting the aspirations of new urban generations who value comfort, elegance and ethics. It's a new "Natural Way" of crafting fashion.

ICICLE's purpose is to offer a "conscious elegance" that resonates with our time, using fashion as a medium to shape a better society.

Jeans are known for the severe problems of waste and pollution they have caused. However, as an indispensable category of our wardrobe, jeans have brought convenience and ease to the modern professional life. ICICLE is a brand that caters to the needs of modern professionals.

To tackle the waste and pollution problems of jeans has been of priority at ICICLE for many years. After putting much effort into investigating reliable textile and manufacturers partners of jeans to work with, we launched our first eco jeans products in 2018 and we have immediately received positive feedback from our eco-conscious customers. Since then, we have been launching eco jeans products every season and upgrading them as we become more informed of new materials or techniques to create more eco-friendly jeans along the way.

When we met the Ellen MacArthur Foundation and found out about The Jeans Redesign, we were impressed by how informative, helpful and practical the guidelines are, and we immediately showed our willingness to become a signatory.

Since the founding of ICICLE, we strongly believe that being sustainable should not be a fashion trend or a marketing gimmick, but an essential manifesto guiding all fashion stakeholders. By joining The Jeans Redesign, ICICLE is ready to start joining forces to shift the momentum from an economy drowned of waste and pollution to a more healthy, sustainable and circular one.

Contact

Isabelle Capron, International VP, ICICLE

JEANS PRODUCED ACCORDING TO THE GUIDELINES

ICICLE produced 53% of the total volume of jeans (in accordance with the Guidelines) initially aimed to by May 2021. Volumes have been submitted to the Foundation only.

This was due to the new product series being adjusted to the current production quantity according to the commercial commodity planning estimation of this season.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet ICICLE's minimum test standard for jeans, which is:

- Abrasion Test ISO 12947-2:2016
- Tensile Force ISO 139342:2014
- Appearance ISO 15487-2009
- Dimensional Stability ISO 6330:2012
- Seam Force ISO 13935-2:2014
- Colour fastness test for washing with soap - ISO 105 - C10:2006

ICICLE did not aim to verify this by third party verification.

ICICLE tested jeans for 30 home laundries and performed one durability test (Abrasion: GB/T21196-2, ISO12947-2) to meet their minimum test standard for jeans. The fabric has been tested for wear resistance and relevant reports are available.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Instructions to not use bleaching detergent

Aimed to verify this by visual inspection of the care label on the product.

ICICLE included an easily accessible label with the information stated above, verified by sharing this information on the garment label. The corresponding content is marked on the wash label of the garments.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by the information of fabric composition on the care label of the jeans products. The fabric will contain 98% of cotton, which will be shown clearly on the care label.

ICICLE ensured material composition met a 98% cellulosic minimum and verified this by the supplier Candiani S.p.A.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

ICICLE ensured additional materials added to the fabric (the essential rivets and button) were easy to disassemble. ICICLE removed unnecessary designs, and these additional materials can be removed with conventional household metal parts removal tools.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

ICICLE ensured metal rivets reduced to a minimum. Only the required i-buckles have been used for the four denim products, and only two necessary rivets per dress in two out of the four stock keeping units (SKUs).

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

ICICLE did not ensure The Jeans Redesign logo was used on the products. However, ICICLE's Jeans Redesign products were announced and distributed with The Jeans Redesign logo on their official WeChat, and they are preparing the hang tag with the logo. They plan to apply logo to the products in the future.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting. However, ICICLE would like to explore the possibility to work with suppliers of such technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. ICICLE aimed to verify this through the ZDHC Gateway.

ICICLE ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the report in 2019 provided by manufacturing factory Shangdong Aspop Costumes Group Inc. They found the qualified manufacturing factory which has followed the relevant ZDHC gateway standards and confirmed it with the certificate.

b. Prohibit the following chemicals or processes:
a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by written declarations signed by ICICLE's own factories and jeans product manufacturers.

ICICLE prohibited the use of the chemicals and processes above and verified this through the report in 2019 provided by manufacturing factory Shangdong Aspop Costumes Group Inc. The manufacturer issued the certificate confirming avoidance of the prohibited chemicals or processes.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by using Global Organic Textile Standard (GOTS) certified fabrics supplied by Candiani S.p.A.

ICICLE sourced cellulose-based fibres from organic methods and verified this by Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS) certification. Candiani S.p.A, their fabric supplier, has provided the fabric certificate of Global Organic Textile Standard (GOTS).

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

Lee

Headquarters
Greensboro, North Carolina, United States

Website
http://www.lee.com/

Product launch
N/A

Category

Organisation description

Backed by 130 years of purposeful design and innovation, Lee's timeless denim style continues to inspire generations. Lee helped build the denim industry, and we work every day to redefine it. Through meaningful partnerships and a commitment to our planet, Lee's For A World That Works™ sustainability platform aims to redefine how Lee operates.

We want to innovate at every step of the denim supply chain, minimising water and energy consumption in sourcing, dyeing, and manufacturing. We know the urgency, and we feel the responsibility of big environmental and social challenges. It's an honour to partner with the Ellen MacArthur Foundation to transform our industry and create a dynamic, sustainable future.

Contact

Jeff Frye, Vice President, Global Procurement, Innovation & Sustainability

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Lee did not meet their commitment and have not produced any jeans (in accordance with the Guidelines) by May 2021. They aimed to produce a product in accordance with the guidelines by May 2020, but due to time constraints in their product development pipeline, they produced a collection, entitled Back to Nature that met all but two of The Jeans Redesign requirements. In particular, the Back to Nature jackets and bottoms are met the standards for "Jeans are made to be made again" and "Jeans are made from safe and recycled inputs", but unfortunately due to the time constraints mentioned above, were not tested for 30 home laundries and did not include information on how to care for jeans visibly on the garment.

The Back to Nature collection is currently available in the U.S. and Europe. With continual improvement in mind, Lee saw The Jeans Redesign as a first step into more stringent certifications. For Fall 2021, Lee has made two Cradle to Cradle certified products, which meet almost all of The Jeans Redesign criteria.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Lee's minimum test standard for jeans.

Lee did not test jeans for 30 home laundries and did not perform durability tests to meet their minimum test standards for jeans, as they haven't produced any jeans yet. Lee was not able to test the Back to Nature collection for 30 home laundries, but as a heritage brand known for long lasting denim, they do perform the below durability tests for jeans:

- Tensile Strength – ASTM D 5034
- Tear Strength – ASTM D 1424
- Seam Strength – ASTM D 1683
- Flex Abrasion Resistance – ASTM D 3885
- Taber Abrasion – ASTM D 3884

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees of below)
- Instructions to avoid tumble drying

Lee did not include an easily accessible label with the information stated above as they have not produced any jeans yet. Lee was not able to include easily accessible labels about caring for the Back to Nature products. However, their Cradle to Cradle certified products do have the following printed on the pocket bags: "Wash less and cold, line dry, repair, recycle or donate".

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by the mill, Kontoor Brands Global Sustainable Business team, third party auditors.

Lee did not meet 98% cellulosic minimum material composition because they have not produced any jeans yet. As a heritage denim brand, many Lee products include a minimum of 98% cellulose-based fibres and the designed to biodegrade Back To Nature product is 85% organic cotton and 15% flax and does not include any synthetics in the trims. The Cradle to Cradle Gold Certified product is 100% cellulosic, the Bronze Certified product includes less than one percent polyester threads in trims. Because material is a taxable item and content claims are regulated, these are verified under the bill of lading.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

Lee did not ensure additional materials added to the fabric were easy to disassemble as they have not produced any jeans yet. However, the Back to Nature product already in market has easy-to-remove buttons that can be reused.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Lee did not ensure metal rivets were removed entirely or reduced to a minimum as they have not produced any jeans yet. However, Lee will reduce to a minimum the metal rivets in the future. In the Back to Nature product, there are no metal rivets.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Lee did not ensure Jeans Redesign logo was used as they have not produced any jeans yet.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Lee aimed to verify this through the ZDHC Gateway.

Lee did not ensure jeans use chemicals that comply with Level 1, ZDHC MRSL, as they haven't produced any jeans yet. However, they are on track to meet this requirement for their products, as through their CHEM-IQ program, they plan to ensure products comply with Level 1, ZDHC MRSL. Kontoor Brands, Lee's parent company, has a 100% preferred chemistry goal by 2025.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by the manufacturer, Kontoor Brands Compliance and Sourcing teams, and third party auditors.

Lee did not prohibit electroplating, potassium permanganate, stone finishing, and sand blasting as they have not produced any jeans yet. However, Lee plans to prohibit the use of chemicals and processes above for their products, verified through their mill and third party auditors where necessary. Since 2012, Lee has not allowed sand blasting in their supply chain and they are actively working to eliminate the use of potassium permanganate in their products, replacing it with laser technology. No conventional electroplating, potassium permanganate, stone finishing or sand blasting was used in the Back to Nature products currently available in market.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods.

Lee did not source cellulose-based fibers from organic methods, as they have not produced any jeans yet. However, Lee plans to use organic cotton for their product. The Back to Nature product is 85% organic cotton, with the other 15% being conventional flax. This is verified under the bill of lading.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. However, they often use recycled content in their products.

MUD Jeans

Headquarters
Almere, Netherlands

Website
https://mudjeans.eu/

Product launch
January 2019

Category

Organisation description

MUD Jeans is a circular denim brand that produces jeans via the principles of the circular economy. As a circular denim brand, it is only natural to see that our sustainability strategy aligns almost perfectly with The Jeans Redesign. Already today, we share various standards in terms of material health and recyclability, which is very empowering. Therefore, MUD Jeans aims to produce all its jeans, 100%, in line with the Guidelines by May 2021. MUD Jeans' initial efforts will focus on durability. Research will indicate if there is still room for improvement on this front.

"Being a circular denim brand and an industry pioneer, MUD Jeans is delighted to participate in The Jeans Redesign. Industry-wide standards concerning recyclability and circularity are urgently needed to make the denim sector more circular. Projects like these pave the way. We are glad to see that our circular denim is performing very well. Our jeans, for example, already contain between 23- 40% post-consumer recycled cotton. Therefore, we want to focus on the durability standard and research if there is still room for improvement."

Contact

Laura Vicaria, CSR Manager, MUD Jeans

JEANS PRODUCED ACCORDING TO THE GUIDELINES

MUD Jeans exceeded their initial commitment and produced 96% of their jeans portfolio in accordance with the Guidelines by May 2021. Volumes have been submitted to the Foundation only. MUD Jeans works with only a handful of fabrics. By limiting themselves to such a small amount, they have greater control over their production process. These fabrics all contain a range of post-consumer recycled cotton, and are all designed based on circular principles. All jeans are leased with the request from customers to return them after use.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet MUD Jeans's minimum test standard for jeans, which is:

- Appearance CA-TM 02
- Dimensional stability ISO 6330
- Tensile strength ISO 13934-2
- Tearing ISO 13937-2
- Abrasion ISO 12947-1
- Seam force ISO 13935-3

MUD Jeans tested jeans for 30 home laundries and performed two durability tests (O69: dimensional changes during washing and drying - 070 Color fastness to washing (ISO 6330)) to meet their minimum test standard for jeans, verified by Nordic Swan Ecolabel testing. Through these tests they were able to ensure that the fabrics were strong and of good quality and withstand 30 washes.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees of below)
- Instructions to avoid tumble drying

Aimed to verify this by sharing this information on the garment label, on the wash consciously page and on all product pages from the MUD Jeans website.

MUD Jeans included an easily accessible label with the information stated above, verified by a jeans label that provides clear guidance on how to wash the jeans. Furthermore, on their website, they also have additional information: https://mudjeans.eu/pages/sustainability-wash-consciously

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by fibre composition in combination with organic content standards such as Global Organic Textile Standard (GOTS) and recycled fibre standards such as Global Recycled Standard (GRS).

MUD Jeans ensured material composition met a 98% cellulosic minimum and verified this by 100% of their collection is cellulose-based consisting of a blend of up to 40% post-consumer recycled cotton and GOTS certified organic cotton. The jeans that contain stretch only use 2% elastane. These requirements are essential because they collect their old jeans back, recycle them and incorporate them into production. Any higher elastane would contaminate the fibre.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The jeans will include recyclable stainless steel buttons and rivets. MUD Jeans confirms it is easy to remove by performing the following technique: mechanical cutting.

MUD Jeans ensured any additional materials added to the fabric were easy to disassemble, for example they have a minimal amount of buttons and they removed entirely the leather patch at the back. They now have a printed version of the leather patch to eliminate the additional creation of waste with that added component. The section that contains the buttons can be easily removed by cutting off.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

MUD Jeans ensured metal rivets were reduced to a minimum, by having from the beginning a minimal use of rivets and buttons due to its circular design. They use one rivet type, and one button. Following the certification process of Nordic Swan Ecolabel, they have also changed their buttons to be made 100% from stainless steel to ensure that they can be recycled after removal during the recycling process.

d. Use The Jeans Redesign logo

Did not aim to use The Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. MUD Jeans aimed to verify this through the ZDHC Gateway.

MUD Jeans ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through Tejidos Royo, their fabric supplier, by completing a water sludge test based on ZDHC standards. They also only work with Global Organic Textile Standard (GOTS) Certified Organic cotton, which is accepted as an equivalent to ZDHC Level 1 according to the latest version of the document "ZDHC Accepted* Conformance Indicators for Verification Against the ZDHC Manufacturing Restricted Substances List (ZDHC MRSL)". In addition, they hold the Nordic Swan Ecolabel, obtained in 2019. In 2021 they dropped this certification and they are currently in the development of a chemical policy based on ZDHC guidelines. Their supply chain partners will be submitting the list of chemicals involved in production, CAS Number as well as a ZDHC certified sludge test where appropriate.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by mutual agreement with the suppliers and is partly assed by the Nordic Swan Ecolabel.

MUD Jeans prohibited the use of the chemicals and processes above and verified this through the Nordic Swan Ecolabel certification process. Additionally, they spoke with their manufacturers who have a clear understanding that they do not tolerate those chemicals and production processes. All jeans are made using sustainable manufacturing techniques such as e-flow and laser in order to achieve similar effects. Since mid-2020 they have also dropped the use of chlorine.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Global Organic Textile Standard (GOTS) certified.

MUD Jeans sourced cellulose-based fibres from organic methods and verified this through a blend of recycled content and Global Organic Textile Standard (GOTS) Certified organic cotton. Jeans that contain stretch only contain 2% elastane in their composition. This limited amount of stretch ensures that the jeans can be recycled and reincorporated into production.

d. Include post-consumer recycled content

Aimed to include 23% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by fibre composition and Global Recycled Standard (GRS).

MUD Jeans included 23-40% post-consumer recycled content (by weight) and verified this through Global Recycled Standard (GRS) certified post-consumer recycled cotton.

nu-in

Headquarters
Gothenburg, Sweden

Website
https://nu-in.com/

Product launch
September 2020

Category

Organisation description

Founded in 2019 by a small group of friends who have worked in the fashion industry for a combined duration of 50+ years, nu-in grew from a desire to create a sustainable clothing brand, both fashion forward and affordable. nu-in is born out of necessity and with responsibility to protect our planet and its inhabitants. Having the lowest possible impact on the environment underpins every decision made. It's simply a given.

We want to be part of the change and strive towards a circular fashion economy as quickly as possible. By being part of Jeans Redesign we will lead by example and hopefully inspire and transform our industry. We need like-minded people and businesses to join together on this mission. Only then will we truly have a greater impact towards saving our planet.

Contact

Rune Gade, Denim Leader & Sustainability Pioneer, nu-in

JEANS PRODUCED ACCORDING TO THE GUIDELINES

nu-in produced the total volume of jeans (in accordance with the Guidelines) initially committed to by May 2021. Volumes have been submitted to the Foundation only. nu-in has changed their supply chain and will be working with a new supplier in Turkey (KOMONTEKS / STROM) on all denim products going forward. They only use sustainable fibres for their jeans but for some high stretch denims the non-cellulosic content is higher than the allowed 2% to secure the right amount of stretch and recovery. Other than that, all their jeans meet The Jeans Redesign requirements.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet nu-in's minimum test standard for jeans, which is:

- Dimensional Stability, Spirality, Colour Fastness and Appearance - Combined Assessment after Washing: AP1W:2017
- Colour Fastness to Domestic and Commercial Laundering: AC1 (ISO 105 - C06 : 2010) A2S@40°C
- Colour Fastness to Rubbing: AC3 (ISO 105 X12 : 2016)
- Colour Fastness to Water: AC2 (ISO 105 E01 : 2013)
- Abrasion Resistance Martindale: AP7(ISO 12947-2 : 1998) Applied Force: 9 kPa
- Mass Per Unit Area: AP43 (Test Method ISO 3801 : 1977)
- Seam Slippage Resistance: AP12 (ISO 13936-2:2004) Applied Force: 80 N
- Seam Strength: AP13(ISO 13935 - 2 :2014)
- Tearing Strength: AP15 (ISO 13937-1 : 2000)
- Tensile Strength and Elongation : AP9(ISO 13934 - 2 : 2014)

Aimed to verify this by INTERTEK.

nu-in tested jeans for 30 home laundries and performed ten durability tests to meet their minimum test standard for jeans, verified by INTERTEK.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Did not aim to verify this by third party verification.

nu-in included an easily accessible label with the following information:

- Wash your jeans only when you have to. This saves a lot of water and your favourite jeans will last much longer and ultimately get a much nicer wear.
- Wash your jeans cold and inside out to preserve the color.
- Do not tumble dry.
- Dry jeans flat to maintain a consistent color.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by INTERTEK. Fiber Identification: EU Directive 1007/2011- Microscopic Identification & Mech. Sep. & Method 7.

nu-in exceeded a material composition of 98% cellulosic minimum and ensured a material composition of 100% cellulose-based fibers, and verified this by INTERTEK. To date, all Jeans Redesign products by nu-in have been made from:

- 100% organic cotton
- 100% recycled cotton
- 80% organic cotton / 20% recycled cotton
- 50% organic cotton / 50% recycled

Additional components like pocket lining have also been made from organic cotton.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The Jeans will include jeans buttons made from 100% recycled brass. The buttons are screwable and easy to detach from the garment. Metal zippers are made from a combination of brass and recycled brass (for durability reasons) and must be cut off before recycling. The zipper tape can be recycled along with the garment. nu-in confirms it is easy to remove.

nu-in ensured all additional materials added to the fabric were easy to disassemble. nu-in have developed a screwable button that is easy to remove but didn't use it in production (yet) as you have to make a hole in the fabric to attach it and that hole is hard to control so the button tends to fall off. So nu-in have removed all rivets. What is left is a shank jeans button made from 100% recycled brass with special eco finishing (no electroplating). For the fly nu-in are using YKK natulon zipper which made from recycled polyester (tape) and recycled brass.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely, and to use bar tacks instead of metal rivets

nu-in ensured metal rivets were removed entirely and replaced the rivets with bar tacks.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

nu-in ensured Jeans Redesign logo was used. nu-in have used the logo printed on the pocket bag (inside). Their plan is to include a story as well that explains about The Jeans Redesign and possibly includes care and product life guide.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting. Looking into implementing a "CircularId" or "RFID" on each garment for consumers to engage with the product and ultimately make it easier to recycle.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. nu-in aimed to verify this through the ZDHC Gateway.

nu-in ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by: CHANTUQUE using EIM (Environmental Impact Measuring) software to measure the impact of each garment. All nu-in jeans have a "LOW IMPACT" score.

nu-in prohibited the use of the chemicals and processes above and verified this through CHANTUQUE using EIM (Environmental Impact Measuring) to measure the impact of each garment. All nu-in jeans have a "LOW IMPACT" score.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS).

nu-in sourced cellulose-based fibres from organic methods and verified this Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS).

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

nu-in included 20% post-consumer recycled content (by weight) in one out of three styles produced in accordance with The Jeans Redesign Guidelines.

Organic Basics

Headquarters
Copenhagen, Denmark

Website
https://organicbasics.com/

Product launch
January 2021

Category

Organisation description

At Organic Basics we constantly search for better innovation, we have a visionary use of sustainable materials - and a continued focus on ethical production. We love Denim because of its versatility, durability and beauty — in January 2021 we have launched our denim collection made with certified sustainable fibers and minimal finishing.

Our denim is also designed for alteration and easy end of life recycling. The Jeans Redesign is a great initiative to help reshape the way denim is made, worn and recycled — and we are proud to be part of this.

Contact

Christoffer Immanuel, Co-CEO and Founder, Organic Basics

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Organic Basics exceeded their initial commitment and produced 100% of their jeans portfolio in accordance with the Guidelines by May 2021. Volumes have been submitted to the Foundation only. The Jeans Redesign program and the launch of Organic Basics denim has been running parallel: in the sense that the jeans they launched as part of the program are also the first jeans ever launched by the organisation.

This made it easier to set up and follow guidelines, as there is no back history for Organic Basics jeans. Initially, they started up with one fabric that had 2% elastane, but they decided to abandon that at an early stage and focus on pure qualities. Adding elastane would probably have made for some short-term wins as it relates to fit and comfort, but they chose fibre purity as they think that it is a better long-term solution.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Organic Basics's minimum test standard for jeans. Aimed to verify this by wash tests conducted by manufacturer followed by durability and abrasion resistance testing.

Organic Basics tested jeans for 30 home laundries and performed two durability tests (durability and abrasion resistance) to meet their minimum test standard for jeans. Their manufacturer conducted wash tests and had the results verified through SGS. They received the pre and post 30 home laundry reports from SGS and photo documentation of the pre and post 30 home laundries of each of their styles from their supplier along with confirmation that durability and abrasion resistance meets their standards. Also, seven of their nine denim products are GOTS certified on product level and meet technical quality parameters set out by GOTS.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Organic Basics included an easily accessible label with the information stated above, verified by checking the production to verify that the labels and prints they requested had been made. A care instructions label state washing and care instructions. In addition the wearers left pocket bags have below information printed on them: "Your new denim will age with beauty over time but the color will possibly transfer onto lighter garments and furniture. For best results it's best to only wash when absolutely necessary. If you really need to, spot clean with a damp cloth, hang them outside to air out, or wash with a mild, eco-friendly detergent on 30°c. Please skip the tumble dryer and air dry instead. Taking good care of your denim and repairing them when you need to will help save our home planet." In addition, Organic Basics promotes care and repair information and education through social channels and on webpage.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this through the manufacturer.

Organic Basics exceeded a material composition of 98% cellulosic minimum and ensured a material composition of 100% cellulose-based fibers. Organic Basics' jeans are made with either 100% organic cotton fabric (GOTS certified fabric) or 89% organic cotton fabric (OCS certified from ISKO) and 11% pre-consumer recycled cotton. Back patch is in FSC jacron. All elements apart from stitching thread and shank buttons are made from cellulose fibres. Organic Basics are researching how to change existing recycled polyester sewing thread to Lyocell thread for future productions.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. Aimed to include Zamak shank buttons confirmed it is easy to remove by unscrewing the screws attaching the shanks.

Organic Basics ensured any additional materials added to the fabric were easy to disassemble. The jeans have metal shank buttons that are easy to remove by unscrewing the screws attaching the shanks.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Organic Basics ensured metal rivets were removed entirely. No metal rivets or zippers are used on any of Organic Basics jeans. Rivets have been replaced with bar tacks.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Organic Basics ensured Jeans Redesign logo was used, by printing it on left pocket bag.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Organic Basics aimed to verify this through the ZDHC Gateway.

Organic Basics ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the manufacturer. Organic Basics can share wash recipes upon request.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this through the manufacturer.

Organic Basics prohibited the use of the chemicals and processes above and verified this through the manufacturer. Organic Basics can share wash recipes upon request.

Their finishing is done with Jeanologia technology using ozone and laser. They measure the environmental impact of the finishes through their EIM (Environmental Impact Measurement) software. The EIM has 3 levels: red, yellow, and green. Green runs from 0 to 33. Organic Basics denim scores between 2 and 19 on the green EMI scale. Also, seven of their nine denim products are Global Organic Textile Standard (GOTS) certified on product level and comply with the general requirements for chemical inputs in all processing stages and the prohibited and restricted inputs.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Global Organic Textile Standard (GOTS) certification.

Organic Basics sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) certification. Organic Basics jeans are made with either 100% organic cotton fabric (GOTS certified fabric) or 89% organic cotton fabric (OCS certified from ISKO) & 11% pre-consumer recycled cotton.

In addition, Organic Basics are funding a regenerative cotton project with the World Wildlife foundation - cotton that may potentially be used for future jeans.

d. Include post-consumer recycled content

Aimed to include 10% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this through the fabric mill.

Organic Basics did not include post-consumer recycled content. However, one of The Jeans Redesign styles included 11% pre-consumer recycled content (by weight) and Organic Basics verified this through the Organic Content Standard (OCS) certification provided by the fabric mill. The styles using this fabric are a chino and a work jacket so they are actually not jeans, but they are part of their broader denim program.

Outerknown

Headquarters
Culver City, California, United States

Website
https://www.Outerknown.com/

Product launch
Planned launch in February 2022

Category

Organisation description

At Outerknown, we've always strived to make every decision with the highest regard for the hands that build our clothes and the world we call home. By working with the Ellen MacArthur Foundation on The Jeans Redesign we hope to enable change across the fashion industry and shed light on circular design, providing tools and resources to the industry at large. At Outerknown, we already meet important guidelines with our SEA Jeans through sourcing organic cotton and designing into disassembly.

We're now challenging ourselves to find a way to improve our process and continue to raise the bar in striving to create the world's most circular denim. "Outerknown mission" is to protect natural resources, empower the people crafting our clothes and inspire change within the industry and beyond. We're excited to participate in The Jeans Redesign to push the boundaries on sustainable practices and create significant environmental and social improvements."

Contact

Megan Stoneburner Azim, Director of Sourcing & Sustainability, Outerknown

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Outerknown did not meet their commitment and have not produced any jeans (in accordance with the Guidelines) by May 2021. This was due to the fact that Outerknown is looking to make not just one product or line in accordance with The Jeans Redesign guidelines, but is working to convert the vast majority of their S.E.A Jeans collection to be produced according to the guidelines. Outerknown has worked to adopt The Jeans Redesign guidelines and are already exceeding some criteria (e.g., jeans are able to withstand a minimum of 50 home laundries). Delay in product launch was due to difficulties faced in the product development phase, notably completely changing multiple denim washes, including finding alternatives to stone washing and potassium permanganate.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Outerknown's minimum test standard for jeans, which is:

- ASTM D5034 Tensile Strength
- ASTM D1424 Tear Strength
- ASTM D1683 Seam Strength and Seam Slippage

Aimed to verify this by SGS third party testing.

Outerknown did not test jeans for 30 home laundries, as they have not produced any jeans yet. However, this requirement is in progress for jeans to be launched in the future. Outerknown S.E.A Jeans have easily passed all testing for 50 home laundries, including durability tests for tensile strength, tear strength, and seam strength and seam slippage. Going forward, Outerknown are looking to be more ambitious and double this. They are exploring whether jeans are able to withstand a minimum of 100 home laundries, this will provide valuable data for both themselves and be helpful information to communicate with their customers on how to best care for the garments.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees of below)
- Instructions to avoid tumble drying

Aimed to verify this by including instructions on the garment.

Outerknown did not include an easily accessible label with the information stated above, as they have not produced any jeans yet. However, they are looking to include easily accessible information, printed on the pocket bag and/or care and content label with the following information:

- Wash only when necessary
- Hand wash cold
- Wash separately
- Wash with like colours
- Do not bleach
- Lay flat to dry
- You are making a difference wear proudly

Outerknown will also update their PDP (product care instructions) online, for the planned launch.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum.

Outerknown did not meet 98% cellulosic minimum material composition, as they have not produced any jeans yet. However, Outerknown confirms that S.E.A Jeans already meet the 98% cellulosic minimum as they are made with 98% organic cotton. The main labels were converted to cellulosic raw materials, with the exception of the thread and small trims due to quality reasons. Outerknown has worked with recycling partners to ensure that these small and minimum amounts of synthetic can be recycled without having to be removed.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

Outerknown did not ensure additional materials added to the fabric were easy to disassemble as they have not produced any jeans yet. However, Outerknown is exploring easily removable and reusable button tacks and dissolvable thread. Outerknown is considering buttons instead of zips for new styles.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Outerknown did not ensure metal rivets were removed entirely or reduced to a minimum as they have not produced any jeans yet. However, Outerknown has always reduced rivets to a minimum and only uses rivets where required for reinforcement to ensure durability.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Outerknown did not ensure Jeans Redesign logo was used as they have not produced any jeans yet. However, for the planned launch Outerknown has updated pocket bag messaging to include The Jeans Redesign logo, and will use once on production of approved denim meeting the guidelines.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting

Outerknown did not ensure technology that enables sorting was used as they have not produced any jeans yet. However, Outerknown plans to exceed their aim and use a technology that enables sorting for the planned product launch: EON's Circular ID and QR code. This will provide material information to recyclers (e.g., garment fabric composition information) to improve sorting for recycling. It also enables easier garment accessibility for resale.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Outerknown aimed to verify this through the ZDHC Gateway.

Outerknown did not ensure jeans used chemicals that comply with Level 1, ZDHC MRSL and did not verify this through the ZDHC Gateway as they have not produced any jeans yet. However, they are on track to ensure this for the planned launch as all denim fabric is Global Organic Textile Standard (GOTS) Certified. Additionally, both Outerknown and their denim laundry are Bluesign approved system partners. These methods are accepted as an equivalent to ZDHC Level 1 according to the latest version of the document "ZDHC Accepted* Conformance Indicators for Verification Against the ZDHC Manufacturing Restricted Substances List (ZDHC MRSL)".

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by Jeanologia EIM reports.

Outerknown did not prohibit electroplating, potassium permanganate, stone finishing, and sand blasting as they have not produced any jeans yet. However, they are on track to prohibit such processes and chemicals by using laser, stone alternatives such as silicone balls, and converting button tack and rivet to electroplated free. Outerknown is currently finalising the washes to eliminate potassium permanganate spray, sand blasting, and stone washing, for their multiple denim washes.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by the Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS) certification.

Outerknown did not source cellulose-based fibers from organic methods and did not verify this through third party certifications as they have not produced any jeans yet. However, all Outerknown denim is already Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS) certified.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. Outerknown is investigating how to incorporate recycled cotton (a mix of both pre-consumer and post-consumer) into future products.

Outland Denim

Headquarters
Tamborine Mountain, Australia

Website
www.outlanddenim.com

Product launch
January 2021

Category

Organisation description

Outland Denim's foundations were built on social sustainability and justice for some of the world's most vulnerable people. However we do not believe one can advocate for social justice without taking steps to protect our environment too by way of managing garment impact in the design, user, and post-life stages. We are driven by an ethos of "zero exploitation" which includes delivering positive social outcomes while mitigating environmental impact pre and post consumer-use and, where we can, improving the ecological and economic status of entire communities. Our production is entirely in-house, which gives us full control not only of our product quality, but also the way in which our goods are produced, by whom and under what conditions. Our environmental stewardship begins with the engagement of suppliers who meet our strict criteria for raw material standards, and is realised in the development of our stand-alone wash and finishing house. This project will ensure the ecological integrity of this crucial part of jean production, and utilises the best available new technology for reducing water usage and carbon emissions.

Our commitment to creating a product life cycle geared toward full circularity is something that we are striving towards daily. In partnership with universities, governments, and institutions around the world, our current research and development projects begin in the areas of water purification, minimising environmental impact through cotton dyeing processes, carbon footprint reduction, minimising our post-industrial and post consumer waste to the point of eradication, and extends to the intricate tracking of social and environmental impact with the use of big data and blockchain technology. We believe that the quality of our design and craftsmanship should reflect our commitment to making products that are enjoyed and worn for a lifetime. As Australia's first denim brand to become a certified B Corporation, we believe that neither communities nor the environment should suffer in the pursuit of fashion. For the betterment of the world and its inhabitants, and the next generations, we enthusiastically commit to the Make Fashion Circular, Jeans Redesign Guidelines proposed by the Ellen MacArthur Foundation.

Contact

James Bartle, Founding CEO, Outland Denim

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Outland Denim produced 35% of the total volume of jeans (in accordance with the Guidelines) initially aimed to by May 2021. Volumes have been submitted to the Foundation only. Discrepancies between this and goal outcomes were caused by COVID-19. Outland Denim's facilities were closed for the health and wellbeing of their team, with staff supported from home, for periods of 2020 and 2021 causing delays in projected production.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Outland Denim's minimum test standard for jeans, which is:

- Physical testing and visual inspection of garments
- Dimensional stability ISO 6330
- Seamforce ISO 13935-2
- Abrasion ISO 12947-2
- *Tear strength ISO 13937-2
- *Tensile strength ISO 139342
- Appearance CA-TM02
- Colour fastness to rubbing ISO 105-X12
- Colour fastness to perspiration ISO 105-E04 or GB/T 3922
- Colour fastness to water ISO 105 - E01
- Stretch and Recovery ASTM D 3107
- Colour fastness to Ozone AATCC 109
- PH ISO 3071
- Colour fastness to artificial light ISO 105-B02

Did not aim to verify this through a third party verification.

Outland Denim tested jeans for 30 home laundries and performed 13 durability tests to meet their minimum test standard for jeans, verified by Outland Denim's Research and Development Engineer. A third party verification is still underway with Intertek at the time of writing.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Did not aim to verify this through a third party verification.

Outland Denim included an easily accessible label with the information stated above. Outland Denim reported they can provide evidence of the publicly available customer education and labelling used. Outland Denim educated consumers in how they can care for their garment in a way that also reduces water and energy use. These guides are shared periodically through social media and email marketing channels. Outland Denim encourages customers to wash once every ten wears inside-out, either separately or with similar colours. Outland Denim encourages customers to use a small quantity of detergent or none at all. If possible line dry, otherwise tumble warm. These guidelines are intended to prolong the life of the product and reduce the environmental impact. Labels currently state that line drying is best, or tumble dry warm if necessary. However, Outland Denim has updated all care label artwork which will now encourage 'no tumble drying' moving forward. Rather than wasting the labels currently produced, this will be a rolling change across all ranges.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this through the fabric supplier Bossa Denim.

Outland Denim ensured material composition met a 98% cellulosic minimum and verified this through the fabric supplier Bossa Denim, who supplied them with fabrics made with 98% cellulose-based fibres. Outland Denim uses organic cotton, tencel, recycled cotton and refibra. Outland Denim has not added any new fabrics into their range with more than 2% non-cellulose-based fibres. Furthermore, Outland Denim is working to change the pocketing from a recycled polyester mix to 100% cotton where possible. Due to delays at their facilities due to COVID-19 hitting hard in Cambodia, they are currently testing new pocketing, but it may be another few months before the tests are complete and they receive new fabrics for bulk production. Because some washes use high amounts of enzymes, these directly attack the cellulose fibres of cotton, reducing the strength of the pocket lining for long life use.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. Outland Denim aimed to include buttons, a minimum number of rivets, and zippers, and confirmed it easy to remove such materials by cutting around the edges of the hardware.

Outland Denim ensured additional materials added to the fabric (buttons, four rivets, and zippers) were easy to disassemble by cutting around the edges of the hardware. Outland Denim is continually sourcing and researching better ways to do this including reconsidering the construction of shanks, as well as the way in which rivets are attached. Outland Denim is also currently testing sewing threads made with tencel and cotton, in order to avoid the use of polyester threads in the future.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Outland Denim has ensured metal rivets were reduced to a minimum by reducing the rivets used in their jeans to four. They are mainly using these rivets at stress points to reduce ripping and create a longer product life. They are trialling reducing to one rivet, but they need to make sure the stress points are secure to maintain longevity of the garment.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Outland Denim ensured Jeans Redesign logo was used. In launching these garments, Outland Denim has promoted its partnership with Jeans Redesign by including the tagline "Made to wear not to waste: this garment was designed to The Jeans Redesign guidelines #jeansredesign." Media outreach was also completed by the brand in key regions of Australia, the US, Canada, and the UK.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Outland Denim aimed to verify this through the ZDHC Gateway.

Outland Denim exceeded their aim and ensured jeans use chemicals that comply not only with the ZDHC MRSL, but also with Green-screen. Moreover, they also use chemicals that comply with Bluesign and Standard 100 by OEKO-TEX. Outland Denim has selected raw materials holding OEKO-TEX Standard 100 certifications. In addition to this, Outland Denim prioritises the use of natural indigo dyes derived from a plant species called indigofera. Where vegetable dyes are not available, Outland Denim ensures any dyes are certified organic or have been tested for harmful chemicals. 100% of Outland Denim garments are made with zero harmful chemicals. This is a requirement of their facilities, as well as the suppliers that they work with. They exclusively use chemicals that meet Green-screen, Bluesign, or Standard 100 by OEKO-TEX certifications, while following a strict adherence to the ZDHC Manufacturing Restricted Substance List (MRSL). Furthermore, by using state-of-the-art technology, Outland Denim products are made with up to 83% less chemical in the Wash and Finishing process when compared to conventional methods.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting, and to exceed this requirement by banning a wider list of chemicals or processes (see below). Aimed to verify this by third party assessment.

a. Conventional electroplating
b. Potassium permanganate
c. Stone finishing
d. Sand blasting
e. Hypochlorite - aimed to eliminate this by using ozone
f. Strong alkali chemicals like Metabisulfite - aimed to eliminate neutralization processes by use of sustainable chemicals
g. Acidic and alkali chemical liquor - aimed to ensure to to nötr condition during chemical processes by utilising alternative techniques
h. High Liquor Ratio rate - aimed to ensure to use low liquor ratio by using different methods
i. Hand sanding - aimed to eliminate hand sanding by use of laser techniques
j. Manual production techniques - aimed to eliminate manual denim processes by use of automation systems like laser, 3D machine, E-flow

Outland Denim exceeded the requirement and prohibited the chemicals and processes above and verified this by third party assessment. Outland Denim reported that the company invested heavily into more sustainable alternatives in their stand-alone facilities (including ozone, e-flow and laser) to replace these harmful processes.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by the Global Organic Textile Standard (GOTS).

Outland Denim sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) certified organic cotton fibres and Tencel in addition to recycled content such as recycled cotton and Refibra. Furthermore, Outland Denim has ensured visibility and traceability of organic methods down to the seed supplier and each of the organic farms making up their supply chain.

Did not aim to include post-consumer recycled content. However, aimed to include up to 20% pre-consumer recycled content on average by weight of the total fabric composition. Aimed to verify this by denim certification from Control Union - Global Recycled Standard (GRS) and Recycled Claim Standard (RCS) Blended.

Outland Denim included recycled content in a selection of their new styles, for example the Abigail Aged Black jean, which contains 40% Refibra (recycled cotton) and 60% virgin organic cotton. Verified this by denim certification from Control Union - Global Recycled Standard (GRS) and Recycled Claim Standard (RCS) Blended. Outland Denim has added a new fabric into its range made with REFIBRA. REFIBRA™ is a new generation of ecological fabrics made of upcycled cotton scraps from pre- and post- consumer cotton waste and Lenzing™ Lyocell fibers coming from wood pulp. Through implementing this new fabric (40% Refibra and 60% organic cotton) into their denim range, they've been able to expand into using post-consumer recycled content.

Reformation

Headquarters
Los Angeles, California, United States

Website
https://www.thereformation.com/

Product launch
March 2021

Category

Organisation description

Founded in 2009, Reformation is a revolutionary lifestyle brand that proves fashion and sustainability can coexist. We combine stylish, vintage-inspired designs with sustainable practices, releasing limited-edition collections for individuals who want to look beautiful and live sustainably. Our stuff is 100% water, waste and carbon neutral, with a commitment to being climate positive by 2025 and Reformation infuses green measures into every aspect of the business. Setting an example for the industry, Reformation remains at the forefront of innovation in sustainable fashion—running the first sustainable factory in Los Angeles, using deadstock and eco fabrics, tracking and sharing the environmental impact of every product, and investing in the people who make this revolution possible.

Contact

Carrie Freiman, Director of Sustainability, Reformation

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Reformation produced a fraction of the total volume of jeans (in accordance with the Guidelines) initially aimed to by May 2021. Volumes have been submitted to the Foundation only. Reformation did not meet the estimated volume commitment for reasons related to COVID business impacts.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Reformation's minimum test standard for jeans.

Aimed to verify this by:

- Tensile strength (ASTM D5034)
- Tearing strength (ASTM D1424)
- Abrasion resistance (ASTM D4966)
- Dimensional Stability to Laundering (AATCC15)
- Appearance after Washing (AATCC 135/150, AATCC TS006)
- Colour fastness to Laundering (AATCC 61)

Testing firms available include Intertek, BACL and in-house testing facilities.

Reformation tested jeans for 30 home laundries and performed six durability tests verified by Bureau Veritas. Durability tests included:

- Dimensional Change Of Fabrics After Home Laundering (Aatcc 150-12, Machine Wash Cold,Gentle Cycle,Flat Dry,Tide Detergent,After 30 Washes)
- Appearance After Care(Cpsd-sl-31055-mthd) Machine Wash Cold,Gentle Cycle,Flat Dry,Tide Detergent, After 30 Washes
- Colorfastness To Laundering: Accelerated (Aatcc 61-13,Test No:2a-mod-cold @29oc, Multifiber No:10, 1993 Aatcc Powder Detergent Wob, After 30 Washes)
- Tensile Strength (Astm D5034, After 30 Care Label Washing, Machine Wash Cold, Flat Dry)
- Tear Strength (Astm D1424, After 30 Care Label Washing, Machine Wash Cold,Flat Dry,After 30 Washes)
- Abrasion Resistance (Martindale) (Astm D4966, Option 1,Load:595 G-9kpa, After 30 Care Label Washing, Machine Wash Cold,Flat Dry)

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees of below)
- Instructions to avoid tumble drying

Aimed to verify this by physical testing with an in-house and/or third party testing firm.

Reformation exceeded their aim of providing an easily accessible label with the information stated above by adding 'donate or recycle'. This was verified in-house and by third party testing. In regards to the specific testing agency, they used BV to test the jeans through the physical tests mentioned. They then verified the test reports submitted by BV met their requirements to be in line with The Jeans Redesign commitment. Verification of label information on the garment was checked through factory and in-house quality control processes.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by fibre composition confirmation of materials, zipper tape, thread, interlinings, and labels used.

Reformation exceeded a material composition of 98% cellulosic minimum and ensured a material composition using 100% or 99% cellulose fibres in the total textile composition. This includes self fabric, pocket lining, and labels. They did not face difficulties sourcing the fabrications used for their rigid fabrications. No issues were encountered with pocketing, they moved to 100% Organic Cotton and labels are 100% Recycled polyester. Reformation found it challenging to source stretch fabrics that meet this criteria and customer demands. They are looking into innovative solutions for these fabrications.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric

Reformation ensured additional materials added to the fabric were easy to disassemble. All extra components that are added to the fabric (rivets, zippers) can be easily disassembled.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Reformation ensured metal rivets were reduced to a minimum. Their design, sustainability, and production teams worked collaboratively to reduce the use of metal rivets from six to four. The team only used them when they were necessary for durability and if they felt they were instrumental to the design of the garment. They tried alternatives like embroidery to eliminate the rivets all together but faced difficulties with executing this idea due to production constraints as well as concerns how this would impact the look of the garment.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Reformation did not ensure Jeans Redesign logo was used. Going forward they will be adding the logo to these styles.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

Reformation exceed their aim and ensured technology that enables sorting was used. In particular, they used Fibertrace technology, which enables sorting as it brings customers to a website that lists what the composition of the material is. In addition, all jeans have a QR code which directs customers to a website which reports composition as well as manufacturing information on each pair of jeans.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Reformation aimed to verify this through the ZDHC Gateway.

Reformation ensured jeans used chemicals that comply with Level 1, ZDHC MRSL. However, they did not verify this through the ZDHC Gateway. They faced challenges to verify this due to the fact that not all their facilities have access to the ZDHC gateway. They plan on becoming Bluesign Systems Partners in the future.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by confirmation of an approved chemical formulations and processes list used by their jean manufacturers. All denim manufacturers must sign their Sustainable Partners Guidebook which outlines requirements for their RSL (AFIRM 2019) and their approved processes and finishes. Additionally, certifications like Oeko-tex and Bluesign will verify safe chemistry as well as self-assessment verification tools like ChemSec and Jeanologia.

Reformation prohibited the use of stone finishing, and the facility developed synthetic stones to replace stone finishing. They worked collaboratively with their factory on different formulations and processes. They tried several synthetic stones available on the market but not all met their needs as they created holes in the fabric during the washing process. They worked with their production partner to develop an alternative that met this requirement.

Reformation prohibited the use of potassium permanganate, sand blasting, and conventional electroplating. The facility provided EIM (Environmental Impact Measuring) software data which documents all processing steps, chemicals and machines used. In particular, they replaced: potassium permanganate with lasers, and conventional pumice stones with synthetic stones or ozone machines. They only used rivets and buttons that didn't use electroplating for finishing.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by supply chain mapping, traceability requirements, Global Organic Textile Standard (GOTS) or Organic Cotton Standard (OCS) scope certifications and Transaction Certificates (TCs).

Reformation sourced cellulose-based fibres from regenerative sources. In particular, they used carbon positive cotton from Good Earth Cotton. In addition, they also used TENCEL™ Lyocell from Lenzing. Regenerative claims were verified through a carbon emissions audit and they verified Good Earth Cotton was used in garments through Fibretrace technology and scanners. They are looking forward to growing their relationship with Fibretrace and to sourcing more regenerative fibres moving forward.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. However, they are working towards including post-consumer recycled content in future collections.

seventy + mochi

Headquarters
London, United Kingdom

Website
https://www.seventymochi.com/

Product launch
June 2020

Category

Organisation description

seventy + mochi is a consciously kind denim brand. Seasonless, long-lasting denim made in Karachi by craftsmen and women using recycled materials, kinder production methods and designing waste out is at the heart of what we do. We are mindful of people and the planet. Joining The Jeans Redesign means we can champion their cause, communicate our practices transparently and reinforce our circular mission. This is denim done the right way.

Contact

Haya Iqbal Ahmed, Founder, seventy + mochi

Kirsty McClean, Brand Strategist, seventy + mochi

JEANS PRODUCED ACCORDING TO THE GUIDELINES

seventy + mochi produced a fraction of the total volume of jeans (in accordance with the Guidelines) initially committed to by May 2021, corresponding to 95% of their jeans assortment. Volumes have been submitted to the Foundation only.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Artistic Fabric Mills (Private.) Limited's minimum test standard for jeans, which is:

- Colour Fastness to Washing ISO 105-C06
- Colour Fastness to Water ISO 105-E01
- Colour Fastness to Perspiration ISO 105-E04
- Colour Fastness to Rubbing ISO 105-X12
- Tear Force ISO 13937-1
- Tear Force (Tongue) ISO 13937-2
- Tensile Strength (Grab) ISO 13937-2
- Seam Slippage ISO 13936-1
- Seam Strength 13935-2
- Pilling Resistance ISO 12945-2
- Fabric Weight ISO 12127-1
- Elastic Behaviour ISO 14704-1 Method A
- pH ISO 3071
- Stretch and Recovery ASTM D 3107
- Domestic Washing and Drying Cycle ISO 6330
- Abrasion Resistance ISO 12947-2

Aimed to verify this through Artistic Fabric Mills at their in-house lab.

seventy + mochi tested jeans for 30 home laundries and performed 16 durability tests to meet their minimum test standard for jeans, verified by their supplier Artistic Fabric Mills at their in-house lab. seventy + mochi used rigid or comfort stretch fabrics only and made sure they are well tested before proceeding to bulk.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by third party physical testing lab.

seventy + mochi included an easily accessible label with the information stated above, sewn into their garments on their wash care labels made from the off-cuts of their pocketing. Additionally, they included further information on their website.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by Cradle to Cradle certificate product standard at Gold Level.

seventy + mochi ensured material composition met a 98% cellulosic minimum. Verified this by Cradle to Cradle certificate product standard at Gold Level.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The Jeans will include minimal rivets, sustainable buttons and poppers where possible to enable easy disassembly and seventy + mochi confirms it is easy to remove by performing the following - disassembly will take place in our own approved sorting centre certified under certifications; Recycled Claim Standard (RCS) and Global Recycled Standard (GRS) by Control Union certification body.

seventy + mochi ensured any additional materials added to the fabric were easy to disassemble. They are working on unscrewable shanks but these are not yet available in their territory. Their future ambition is to use unscrewable shanks when they are available to buy with eco-finishing in the same country of their manufacturing as they do not want extra carbon footprint added due to shipping. In the meantime, they use easily removable buttons instead of shanks.

c. Remove rivets entirely or reduce them to a minimum

Aimed to reduce metal rivets to a minimum of between zero and four.

seventy + mochi ensured metal rivets were reduced to a minimum. Where possible they have removed the rivets used but they still have them on their five pocket jeans but they have kept this to a maximum of four only for the purposes of durability. They will look into threaded rivets in the future.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

seventy + mochi ensured Jeans Redesign logo was used on their Instagram account and on their website. Aimed to print this onto the pocketing with the wash care and fabric composition info.

e. Use technology that enables sorting

Aimed to use technology in collaboration with Artistic Fabric Mills (the first company with installed recycling plants PIW - Post Industrial Waste & PCW - Post Consumer Waste in Pakistan). seventy + mochi have their own approved sorting centre certified under certifications; Recycled Claim Standard (RCS) and Global Recycled Standard (GRS) by Control Union certification body.

seventy + mochi did not ensure technology that enables sorting was used however, they are looking into adding QR codes but have not yet done this. All the products info is on their site clearly written when the consumer is browsing.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. seventy + mochi aimed to verify this through the ZDHC Gateway and IPE platform and Cradle to Cradle 1product certification standard at Gold level. Artistic Fabric Mills is treating 100% industrial wastewater through WWTP according to ZDHC wastewater guideline version 1.1 published in July 2019. The test reports are uploaded on ZDHC gateway portal by third party testing lab. Published & verified by ZDHC.

seventy + mochi ensured jeans use chemicals that comply with Level 1, ZDHC MRSL. Their mill is ZDHC compliant.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by

- Cradle to Cradle Certified® product standard at Gold level.
- Aimed to use laser instead of chemicals.

Aimed to verify this by clean chain portal-ZDHC gateway portal.

seventy + mochi prohibited the use of potassium permanganate, stone finishing, and sand blasting, using only laser and other low impact washes. It has been fairly straightforward to control their washes as they generally do not need very aggressive washes and their partners own the laundry they use.

seventy + mochi prohibited the use of conventional electroplating and don't have any conventionally electroplated hardware. In particular, they used YKK eco finishes. This has been fairly straightforward but, as mentioned above, they would like to use this with unscrewable shanks too, which are not currently available. They use YKK recycled polyester zips and again these were straightforward to use.

In addition, seventy + mochi measure their impact using EIM (Environmental Impact Measuring) software's scoring system and are working to achieve LOW IMPACT on all of their jeans.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS), Organic Content Standard (OCS) and also Transaction Certificate is issued after every shipment or transaction by the certification body (Control Union) which is also known source to verify the claim of the contents.

seventy + mochi sourced cellulose-based fibres from organic cotton. All of their collection is made from a blend of certified Global Organic Textile Standard (GOTS) organic cotton and post- and pre-consumer fabrics that are made at their own partner's shredding plant and spun at their mill partner's facility - all within the same city to reduce carbon footprint. They also use a few hemp and organic cotton blended fabrics, two of which are Cradle to Cradle certified.

d. Include post-consumer recycled content

Aimed to include a minimum of 5% pre-consumer recycled content (white cotton) verified by Recycled Claim Standard (RCS). Their supplier Artistic Fabric Mills is the first Cradle to Cradle certified company making products with pre-consumer recycled content (white cotton). In addition, they are certified with Global Recycled Standard (GRS). Aimed to verify this by Recycled Claim Standard (RCS) – Control Union certification body.

seventy + mochi jeans included 20% recycled content (made up of both post-consumer and pre-consumer recycled content) by weight on average. In particular, seventy + mochi's fabrics compositions vary but all new SS22 fabrics had a minimum of 20% recycled cotton for indigos and black and 5% for pfd. Both pre- and post-consumer cottons are Global Recycled Standard (GRS) certified.

Tommy Hilfiger

Headquarters
Amsterdam, Netherlands

Website
https://global.tommy.com/

Product launch
March 2021

Category

Organisation description

In a world with limited resources, we must move to an industry founded on circular economy principles. Through transparency and coming together to share best practices we can drive the fashion landscape forward towards this future vision. As a global leader in denim, we are proud to join the Ellen MacArthur Foundation Jeans Redesign alongside other brands that are committed to the circular transformation of our industry. Over the past years, we have made positive steps in our denim production through low-impact finishing, more sustainable cotton and better dyeing technology. Participating to The Jeans Redesign Guidelines is just one of several ways Tommy Hilfiger is moving from a take-make-waste approach to a system where we reuse, repair, recycle and share. As part of this journey, we are bringing product innovation with sustainability benefits. We will continue to join forces with our industry partners to create best-in-class designs in ways that are both socially and environmentally positive.

Contact

Baptiste Blanc, Senior Director Communications and Earned Media, Tommy Hilfiger

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Tommy Hilfiger exceeded their initial commitment and produced more jeans (in accordance with the Guidelines) than they originally aimed to by May 2021. Volumes have been submitted to the Foundation only. Tommy Hilfiger reported that Jeans Redesign products have been selling similarly to their other denim offerings, resulting in a higher quantity compared to their initial commitment.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries by conducting the following tests:

- Dimensional Changes: AATCC#150/158#179 Modified
- Colorfastness to Crocking. Crockmeter Method: AATCC#8
- Breaking Strength and Elongation of Textile Fabrics: ASTM D-50342
- Tearing Strength: ASTM D-1424
- Failure in Sewn Seams of Woven Fabrics: ASTM D-1683
- Mass Per Unit Area (Weight) of Fabric: ASTM D-3776

Aimed to verify this by accredited third party test labs nominated by PVH Corp., parent company of Tommy Hilfiger. These requirements are exclusive to the Jeans Redesign Guidelines and do not reflect all minimum global quality standards and requirements for denim products as outlined by PVH Corp.

Tommy Hilfiger tested jeans for 30 home laundries and performed three strength tests (as stated below) to meet their minimum test standard for jeans. In 2020, after extensive testing, Tommy Hilfiger determined the following requirements were suitable to test durability after 30 home laundries and verified this by accredited third party test labs nominated by PVH Corp.

- Tensile strength ASTM D5034
- Tear strength ASTM D1424
- Seam slippage strength/stress points/pocket reinforcement strength ASTM D1683 + ASTM D7506

Tommy Hilfiger reported that their Jeans Redesign products meet their PVH Global Quality standards and requirements. The Tommy Hilfiger denim workgroup agreed that the durability aspect should be about the strength and longevity of the denim garment. Due to the natural characteristic of indigo dyed fabrics, they could not guarantee the colorfastness performance during the additional testing. While the indigo color will fade out due to wearing and washing, which will result in a different outlook of the denim garments, it is not affecting the strength.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduce washing frequency
- Cold wash – wash at 30 degrees or less
- Avoid tumble-drying.

Aimed to verify this by accredited QA third party test labs conducted for appearance after cold wash.

Tommy Hilfiger included the information stated above as part of a pocket print on Jeans Redesign products. This was verified by accredited QA third party test labs conducted for appearance after cold wash. In particular, the following wording was included in: "WASH LESS, INSIDE OUT, ON A COLD SETTING AND LINE DRY. REPAIR, DONATE OR RECYCLE."

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify the weight of all components of denim garment by accredited QA third party test labs.

Tommy Hilfiger ensured material composition met a 98% cellulosic minimum and verified this by accredited QA third party test labs. In particular, the main fabric, pocketing and woven labels are made of 100% organic cotton. No interlining has been used. The only quantity of polyester included in the Spring 2021 collection has been 30% polyester in the stitching yarns, in order to ensure durability. As a result, the jeans consisted of 98% cellulosic fibres. They faced challenges sourcing a fully cellulosic stitching yarn, which could withstand both industrial and home laundry washing.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

Tommy Hilfiger ensured any additional materials added to the fabric were easy to disassemble. In particular, metal shank and fly buttons are made with a screw, so they can be removed before recycling. The 'Make Circularity Possible' hangtag explains that buttons can be taken off, before the garment can be recycled. Additional testing was needed to ensure screw buttons were attached properly.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Tommy Hilfiger ensured metal rivets were removed entirely. Metal rivets were replaced with straight bartacks. Several embroidery rivet techniques have been tested, and the straight bartack came out of the tests to be the strongest.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Tommy Hilfiger ensured Jeans Redesign logo was used, by printing it on the pocket-bag, including an explanation on The Jeans Redesign project. The print has been tested to still be readable after 30 home laundries, which has been verified internally.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Tommy Hilfiger aimed to verify this through the ZDHC Gateway.

Tommy Hilfiger ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway. PVH Corp.'s (parent company) vendors and mills are all compliant with the ZDHC MRSL. PVH Corp. is committed to using safer substances in the materials used to manufacture their products and within the manufacturing processes to protect consumers, workers, sourcing communities, and the natural environment.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by accredited QA third party verified EIM (Environmental Impact Measuring) software reports, as part of the internal PVH Europe / Tommy Hilfiger Global 'Lower Impact Denim' (LID) programme processes.

Tommy Hilfiger prohibited the use of the chemicals and processes above and verified this through EIM (Environmental Impact Measurement) software reports with 'green scores (0-33)' verified by assigned PVH QA verifiers. In particular, such chemicals and processes were avoided by using the following alternatives:

a. Screw-off buttons have eco-plating. By not employing a conventional electrical plating process, it is possible to reduce the amount of water, chemicals and electricity without using hazardous substances such as heavy metals.

b. Laser was used instead of Potassium Permanganate

c. Enzyme wash was used instead of stone washing.

d. Sand blasting is not allowed in Tommy Hilfiger's supplier factories.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by organic cotton certification (e.g. Organic Exchange (OE)) for all cellulose-based components of the garment.

Tommy Hilfiger sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) certification. The Spring 2021 Collection (in accordance with the Guidelines) consisted of 100% organic GOTS certified cotton. Tommy Hilfiger's suppliers submitted Scope and Transaction Certificates for verification.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. This was due to the aim to use the strongest possible fabric option. Tommy Hilfiger is planning to include recycled content for future Jeans Redesign collections. Careful testing will be executed, as the fibre length of recycled content can be shorter compared to virgin cotton. This can potentially impact the test results of the 30 home laundry tests.

Triarchy

Headquarters
Los Angeles, California, United States

Website
https://triarchy.com/

Product launch
September 2020

Category

Organisation description

Triarchy outfits like minded individuals in the best pair of jeans possible, in every sense of the word best. We reduce unnecessary water consumption, chemical and energy use in denim production & we educate and engage consumers to better understand what goes into making a pair of jeans. Helping them to make better decisions via messaging around self awareness and mindfulness. The Jeans Redesign is very near and dear to our hearts as our industry needs a structure of sustainability in place for brands to adhere to, and for consumers to understand. We are proud to be a part of this.

Contact

Adam Taubenfligel, Creative Director, Triarchy

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Triarchy exceeded their initial commitment and produced 84% of their jeans portfolio in accordance with the Guidelines by May 2021. Volumes have been submitted to the Foundation only.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Triarchy's minimum test standard for jeans.

Aimed to verify this by:

- Appearance: CA-TM 02
- Dimensional stability ISO 6330
- Tensile force ISO 139342
- Seam force ISO 13935-2
- Abrasion ISO 12947-2

Triarchy tested jeans for 30 home laundries and performed five durability tests (appearance, dimensional stability, tensile force, seam force, and abrasion) to meet their minimum test standard for jeans. They verified this through their garment manufacturer.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by visual inspection of the garments.

Triarchy included an easily accessible label with the information stated above, verified by visual inspection.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by Global Organic Textile Standard (GOTS) certification and by fabric composition on Care and Content label.

Triarchy ensured material composition met a 98% cellulosic minimum and verified this by GOTS certification and by fabric composition on Care and Content label.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The Jeans will include trims which are easy to remove by performing the following: cutting out.

Triarchy ensured any additional materials added to the fabric were easy to disassemble. In particular, the buttons are easily removable with minimal effort. They do not use removable buttons, as they tested them and found they were unreliable so they had to balance circularity with a durable product.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely and replace with bar tacks.

Triarchy ensured metal rivets were removed entirely. They discontinued use of rivets nearly two years ago, relying solely on bar tacks.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Triarchy ensured Jeans Redesign logo was used.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Triarchy aimed to verify this through the ZDHC Gateway.

Triarchy ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by manufacturer and/or process audit.

Triarchy prohibited the use of potassium permanganate, stone finishing, and sand blasting and verified this through their manufacturer's process audit (Strom Denim). In particular, they used e-flow instead of potassium permanganate, eco ball (rubber) instead of stone finishing, laser machine and ozone instead of sand blasting.

Triarchy prohibited the use of conventional electroplating and verified this through their manufacturer's process audit (Dorlet). In particular, they used eco-plating, which reduces water consumption by 50%, reduces electricity use by 60%, and reduces metal consumption by 90% with regard to galvanic process.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this through Global Organic Textile Standard (GOTS).

Triarchy sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) and their fabric supplier Candiani.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. However, they will do in the new collection with recycled cotton.

unspun

Headquarters
San Francisco, California, United States

Website
https://unspun.io/

Product launch
January 2021

Category

Organisation description

unspun automates the design process to make jeans on-demand, unique to your body shape and style. Our mission is to reduce global carbon emissions by 1% through the best fitting jeans with the lowest environmental impact. We divert waste jeans away from landfill since every pair of jeans is created on demand. In this context, The Jeans Redesign by the Ellen MacArthur Foundation allows us to take an extra step to ensure each pair of jeans is created with durability, material health, and recyclability in mind.

It is crucial also because we as an industry need to work together and converge on platforms like this to make tangible strides collectively to drastically reduce harm done to the environment.

Contact

Walden Lam, Co-founder, unspun

JEANS PRODUCED ACCORDING TO THE GUIDELINES

unspun exceeded their initial commitment and produced more jeans (in accordance with the Guidelines) than they originally aimed to by May 2021. Volumes have been submitted to the Foundation only. They initially planned to have only one product adhering (as a start) to The Jeans Redesign guidelines and did a 'sales forecast' based on the previous year's sales to get to their goal. But they have grown as a business and so, they sold more than expected. They also ended up having not only one, but multiple products that adhere to the Guidelines.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet unspun's minimum test standard for jeans, which is:

- ASTM D 5034 Tensile Strength
- ASTM D 1424 Tear Strength
- ASTM D 3882-99 Skew Movement
- ASTM D 3107-75 Stretch Growth
- Shrinkage Test

Aimed to verify this by collecting wearlogs from their customers and requesting relevant tests/ certifications to suppliers involved in the fabric production.

unspun tested jeans for 30 home laundries and performed four durability tests (tensile strength, tear strength, skew movement, stretch growth) to meet their minimum test standard for jeans, verified by conducting ongoing wearer and wash tests, and this fabric was developed by the mill (Panther denim) to meet the requirements of The Jeans Redesign program.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Instructions to avoid bleaching
- Instructions to avoid dry cleaning
- Instructions to iron at low heat
- Instructions to wash inside-out with dark garment

Aimed to verify this by indication on Care Label printed on the jeans' pocket and website product pages.

unspun included an easily accessible label, printed onto the pocket bags, with the following information:

- Wash less! These jeans are made from durable fabric that's made for multiple wears, only wash when necessary.
- 30 degree cool wash
- do not use bleach
- line dry in shade
- low heat iron
- do not dry clean
- wash inside-out with dark garments

This was verified by adding these wash care labels to all of their jeans.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by the fabric fact sheet provided by the mill and by fibre composition disclosed on Care and Content label.

unspun exceeded a material composition of 98% cellulosic minimum and ensured a material composition of 99% cellulose-based fibres (by weight) in the total textile composition. Specifically, fabrics are made with 99% organic cotton, and pockets are made from 100% organic cotton. The only non-cellulose-based components are the buttons, zippers and zip tape (which is made from recycled polyester).

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. Aimed to include a dissolvable thread and removable buttons, and unspun confirms these are easy to remove, respectively, by melting the thread and unscrewing the buttons.

unspun enabled easy disassembly of any additional materials that are added to the fabric. Included a dissolvable thread and removable buttons and unspun confirms these are easy to remove, respectively, by melting the thread and unscrewing the buttons. The dissolvable thread is supplied by Resortecs and unspun reported that they use this thread as a replacement for normal threads without issues. In addition, unspun included a QR code printed onto the pocket that does not need to be removed for recycling.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely.

unspun ensured metal rivets were removed entirely, by using bar tacks instead. They have never used rivets on their products.

d. Use The Jeans Redesign logo

Aimed to use Jeans Redesign logo.

unspun Jeans Redesign logo was used by placing it as a print in the RHSW pocket of the jeans that comply with the guidelines.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

unspun exceeded their aim and used a sorting technology in their Jeans Redesign products. Unspun have partnered with EON to add a QR code into Jeans Redesign garments so that customers can know where to send them to be upcycled or recycled.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. unspun aimed to verify this through the ZDHC Gateway.

unspun ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the fabric supplier Panther denim, who is registered on the ZDHC Gateway.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this for a) and b) by mutual agreement and confirmation of an approved chemical formulations and processes list used by their manufacturers and for c) and d) by not undergoing any finishing, which is the case for all their jeans.

unspun prohibited the use of the chemicals and processes above and verified it, for every banned chemical or process, as follows:

a. Buttons are made from raw zinc alloy from Dorlet,and are removable. They do not have electroplating at all. Zips are made from non-electroplated raw brass from Ideal Earth Fasteners.

b. Where needed, unspun uses laser and have never used any PP spray on their garments.

c. Unspun do not use stone washing on their garments

d. Unspun do not use sand blasting on their garments

e. Unspun jeans are finished in an eco-washing method by Frontline Clothing Ltd. – using Bluesign approved chemicals from Garmon chemicals, recycled water in a closed loop process with technology from Tonello's ALL-IN-ONE system.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by supply chain mapping, traceability requirements, Global Organic Textile Standard (GOTS) certification, and whenever possible using fibres supplied from Lenzing.

unspun sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) certification organic cotton.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

Weekday

Headquarters
Stockholm, Sweden

Website
https://www.weekday.com/

Product launch
October 2020

Category

Organisation description

Weekday is a Swedish street/fashion brand influenced by youth culture and street style. Founded in 2002, Weekday currently ships to 97 markets and has stores in 16 countries, offering a unique retail experience, carefully curated limited-edition collaborations and a mix of women's and men's assortments.

Facebook: weekday Instagram: @weekdayofficial Web: weekday.com

Contact

Per Axen, Responsible designer denim, Weekday

Anna Norling, Head of Design, Weekday

Ulrika Jakobsson, Responsibility Coordinator, Weekday

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Weekday produced the total volume of jeans (in accordance with the Guidelines) initially committed to by May 2021. Volumes have been submitted to the Foundation only.

By having a close collaboration with GPO (Global Production Organization) and a tight internal team, Weekday met and solved the challenges in a collaborative way.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Weekday's minimum test standard for jeans, which is:

- Tensile Strength (ISO13934-2)
- Tearing (ISO13937-2)
- Dimensional stability (ISO6330) modified based on customers washing method
- 30 degree Celsius temperature wash and line dry method to reach the 30 home laundries

Weekday tested jeans for 30 home laundries and performed three durability tests (tensile strength, tearing strength, dimensional stability) to meet their minimum test standard for jeans.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Dark Colour Denim may transfer onto light coloured materials
- Wash with similar colours and similar material

Did not aim to verify this by third party verification.

Weekday provided the information stated above visibly on the garment. To reduce the amount of fabric used, washing information was printed on pocket lining, in addition to information on how to take care of denim in the best way and to let it age in the most beautiful way. Such information was printed with waterbed acrylic. Due to legal reasons Weekday couldn't have the washing instruction of 30 degrees or less on the care label. Instead they added advice that customers shouldn't wash jeans too often, as well as some additional care tips.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by Content analysis testing method: Deviation of fibre content ISO1833.

Weekday exceeded a material composition of 98% cellulosic minimum and ensured a material composition of 100% cellulose-based fibers. This was verified by the following content analysis testing method: Deviation of fibre content ISO1833. They managed to achieve this by taking away all unnecessary materials and ensuring the use of 20% post-consumer recycled content. As a result, no elastane was used, but only rigid material. Making threads out of cellulosic content represented a challenge.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. Aimed to include metal trims and ensured that partnering organisations I:CO and Re:newcell can remove and collect metal trims for recycling. Weekday also collaborates with YKK to develop durable metal trims (rivets and buttons) in decreased metal weight and minimize use of mixed metal types and plating to increase recyclability.

Weekday ensured any additional materials added to the fabric were easy to disassemble. Weekday ensured this by using four removable "screw" buttons instead of five regular buttons. Weekday did not use labels such as care-labels or back patches. Weekday used "Natura cell thread", which is made of 100% cellulosic fibers, organic cotton or infinito® (a biodegradable polymer). This was achieved thanks to a close collaboration with GPO (Global Production Organization). The challenges has been to set the thread schedule in such a way that would avoid tearing on specific areas and to use as little material as possible where a thicker tread was not needed, such as in the top-stitches. Using a thicker thread where tearing is most common, Weekday avoided the risk of wear and tear. And by using a thinner thread where tearing is not so common, Weekday made sure to use as little material as possible. Weekday used certified Lenzing Tencel™ thread. Avoiding back patches has been reported to be easy. To achieve the use of "screw" buttons, Weekday started with a 3D sketch to make the development process easier.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Weekday ensured metal rivets were removed entirely. Weekday used bar tacks from natural biodegradable thread instead.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Weekday ensured Jeans Redesign logo was used, by printing it on pocket lining.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Weekday aimed to verify this through the ZDHC Gateway.

Weekday ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway. This was achieved by having a close collaboration with GPO (Global Production Organization). They normally only use five-minute washes so this was not a big challenge.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to comply with this by adopting the following measures:

- Conventional electroplating: for this project Weekday is only using metal trims in their natural raw metal colour (stainless steel). That means, no plating (neither eco or conventional, or oxidation) is used.
- Potassium permanganate: Weekday can show the wash recipe of what has been used.
- Stone finishing: Weekday can show the wash recipe of what has been used. In particular, only a five-minute rinse wash has been performed.
- Sand blasting: Weekday (as well as brands within H&M Group) is since 2012 only allowing production in factories that are entirely sand blasting-free.

Weekday prohibited the use of the chemicals and processes above, by adopting the above measures. They achieved this by reducing the overall amount of materials and chemicals used.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS).

Weekday sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS).

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

Weekday exceeded their aim and included 20% post-consumer recycled content on average (by weight) of the total fabric composition. This has been verified by Global Recycled Standard (GRS).

Wrangler

Headquarters
Greensboro, North Carolina, United States

Website
https://www.wrangler.com/

Product launch
June 2020

Category

Organisation description

At Wrangler, we care about the planet and the people that call it home. So we're taking the steps to reduce the boot print we leave on the Earth with ambitious sustainability goals and industry-leading practices to achieve them. We're here to leave an impression, not an impact.

The courage to charge ahead, preserve the planet and protect all people, is needed now more than ever, at Wrangler, we're proud to be members of this coalition and help shift the industry towards more purposeful design and manufacturing.

Contact

Jeff Frye, Vice President, Global Procurement, Innovation & Sustainability

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Wrangler produced a fraction of the total volume of jeans (in accordance with the Guidelines) initially aimed to by May 2021. Volumes have been submitted to the Foundation only. The products that meet the Guidelines include: 27406 (Men's Bottoms – three styles), 13MWZPW (Men's Bottoms) and Rustler PreWash (Men's Bottoms). As a brand committed to continual improvement, Wrangler has also designed additional Jeans Redesign products which will be available for Spring/Summer 2022 – including bottoms for women, men, and boys. While all these products meet the standards of the Jeans Redesign, they are not all exactly the same, making the design and product development process more challenging.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Wrangler's minimum test standard for jeans, which is:

- Tensile Strength – ASTM D 5034
- Tear Strength – ASTM D 1424
- Seam Strength – ASTM D 1683
- Flex Abrasion Resistance – ASTM D 3885
- Taber Abrasion – ASTM D 3884

Wrangler tested jeans for 30 home laundries and performed three durability tests (as stated below) to meet their minimum test standards for jeans:

- Tensile Strength – ASTM D 5034
- Tear Strength – ASTM D 1424
- Seam Strength – ASTM D 1683

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by the accredited lab in the Quality Assurance department at Kontoor Brands.

Wrangler included an easily accessible label with the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)

As a build on the Jeans Redesign program, Wrangler has begun to add a "WeCare Label" to many products which will include the above stated information and other ways for more sustainable consumer care.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum.

Wrangler ensured material composition met a 98% cellulosic minimum, by making all their five Jeans Redesign products out of 100% cotton. In addition, Wrangler is on track to ensure the material composition for each of the six new Jeans Redesign products (to be launched in Spring/Summer 2021) will meet a 98% cellulosic minimum, verified under the bill of lading as material context is a taxable item and content claims are regulated. Of the six new products, five will include 99% regenerative cotton and one will include 100% organic cotton.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

Wrangler enabled easy disassembly of any additional material that is added to the fabric, by making all five products with minimal trims. In addition, the Wrangler Design Team has been working to limit the amount of additional components to their new Jeans Redesign products, aiming to enable their easy disassembly. New Jeans Redesign garments will not contain RFID tags or any additional metals.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Wrangler ensured metal rivets were reduced to a minimum. In addition, of the six new Jeans Redesign products they plan to launch in the future, Wrangler plans to use no rivets in five and minimal recycled metal rivets in one.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Wrangler did not use The Jeans Redesign Logo on the products.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Wrangler aimed to verify this through the ZDHC Gateway.

Wrangler ensured the jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, ZDHC MRSL as a minimum. Through their CHEM-IQ program, they ensured the products comply with Level 1, ZDHC MRSL. Wrangler has been working toward their Global Sustainability Goal to ensure 100% chemistry used in their products is preferred chemistry for a few years and did not have difficulty ensuring their products comply with Level 1, ZDHC MRSL.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by the mill, Kontoor Brands Global Sustainable Business team and third party auditors where necessary.

Wrangler prohibited the use of conventional electroplating, potassium permanganate, stone finishing and sand blasting. Verified this by the mill, Kontoor Brands Global Sustainable Business team, and third party auditors. Wrangler has not allowed sand blasting in their supply chain since 2012 and has been actively working to reduce the use of potassium permanganate in their products. Where necessary, the products were finished with laser. Additionally, no conventional electroplating has been used. Depending on the product, metal buttons are made from raw copper or recycled.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic, in transition or regenerative methods, and to verify this by the Field to Market Fieldprint Calculator.

Wrangler sourced cellulose-based fibers from the United States, from sources that are in transition to regenerative practices. This was verified by the Field to Market Calculator. For their new Jeans Redesign products, Wrangler will source cotton verified by Field to Market's Fieldprint Calculator as regenerative cotton. One garment will include 100% organic cotton. Due to the nature of cotton yarn spinning and fabric construction and the blending of cotton during opening and cleaning, the process of ensuring the cotton in the garments is regenerative or organic required closer than normal collaboration with the fabric mill. However, Wrangler has a Global Sustainability Goal to source 100% sustainable cotton by 2025 and the lessons learned from this process will help them reach that goal.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. In many of the products, however, they do use recycled content in trims, including in their fit and care label, riser label, zipper and patch.

Garment manufacturers

AGI Denim

Headquarters
Shahra-e-Faisal, Karachi, Pakistan

Website
https://agidenim.com/

Product launch
N/A

Category

Organisation description

Well before the climate emergency entered mainstream conversations, we at AGI Denim were re-examining our relationship with resources. Whether it is the way we source cotton, our impact on the oceans or how much water we use. It has been a journey of discovery with many triumphs, like our breakthrough Double Zero Technology which leads to 95% saving of the water used in indigo dyeing and mercerize finishing. We also work with others to support sustainable water management, collaborating with WWF and the Alliance for Water Stewardship to implement the necessary standards at our facilities. In addition to recycling our wastewater since 2017, we are committed to using water as efficiently as possible in our operations and promoting water stewardship throughout our business and beyond.

Our pledge to our planet stretches beyond the confines of denim manufacturing, into the coast of our hometown of Karachi, to the indigenous mangrove forests. Providing defense against storms and flooding, as well as sustaining wildlife, Pakistan's mangrove forests are among the fifth largest in the world, we work with local communities to protect, investigate, and renew this threatened ecosystem. As a family business with a 70-year heritage, AGI Denim has, at its core, the desire to find ways to meet the needs of the present, without compromising the aspirations of the future. Over the years we have taken several tangible steps towards responsible production, whilst reducing our carbon footprint. AGI Denim is proud to collaborate with the Ellen MacArthur Foundation's The Jeans Redesign Project, to find creative solutions that are sensitive and efficient.

Contact

Hasan Javed, Executive Director, AGI Denim

Aisha Javed, Executive Director, AGI Denim

JEANS PRODUCED ACCORDING TO THE GUIDELINES

AGI Denim produced the total volume of jeans (in accordance with the Guidelines) initially committed to by May 2021. Volumes have been submitted to the Foundation only. AGI has been continuously practicing core principles of the circular economy. For this reason they have been producing 20% of every collection keeping circularity in mind, which are being offered to different customers.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM)'s minimum test standard for jeans, which is:

- Colour Fastness to Washing ISO 105-C06
- Colour Fastness to Water ISO 105-E01
- Colour Fastness to Perspiration ISO 105-E04
- Colour Fastness to Rubbing ISO 105-X12
- Colour Fastness to Ozone ISO 105-G03
- Colour Fastness to Light ISO 105-B02
- Tear Force ISO 13937-1
- Tear Force(Tongue) ISO 13937-2
- Tensile Strength (Grab) ISO 13937-2
- Seam Slippage ISO 13936-1
- Seam Strength 13935-2
- Pilling Resistance IDO 12945-2
- Fabric Weight ISO 12127-1
- Elastic Behaviour ISO 14704-1 Method A
- pH ISO 3071
- Stretch and Recovery ASTM D 3107
- Domestic Washing and Drying Cycle ISO 6330
- Abrasion Resistance ISO 12947-2

Aimed to verify this with a third party physical testing.

Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM) tested jeans for 30 home laundries and performed 18 durability tests (as stated above) to meet their minimum test standard for jeans.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduce washing frequency
- Cold wash – wash at 30 degrees or less
- Avoid tumble-drying
- Wash inside out
- Wash with like colour

Did not aim to verify this requirement.

Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM) included an easily accessible label with the information stated above.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum.

Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM) ensured material composition met a 98% cellulosic minimum.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM) ensured that any additional materials added to the fabric were easy to disassemble. In particular, the centre front shank is easy to remove by cutting or pulling off. In addition, metal zippers were replaced by zippers made from recycled materials, which can be easily cut off from the garment.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove all metal rivets or use recyclable ones. Aimed to include Centre Front Shank as the only metal hardware.

Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM) removed all metal rivets.

d. Use The Jeans Redesign logo

Not applicable, use of The Jeans Redesign logo is down to brand approval.

e. Use technology that enables sorting

Not applicable, use of technology that enables sorting is down to brand approval.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM) aimed to verify this through the ZDHC Gateway.

Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM) ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum.

Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM) implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. They verified this by publishing wastewater reports on the ZDHC Gateway.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above).

Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM) ensured the wastewater volume created for denim fabric was a maximum of 0.025m3/yard. In particular, the maximum consumption was 0.018 m3/yard excluding utility.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of the conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to comply with this requirement by using:

- Laser technologies (Jeanologia)
- Ozone
- Various alternative chemicals to replace PP
- Eco-stones
- EIM scoring

Claimed that sand blasting has not been used since 2009 by AGI Denim.

Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM) prohibited the use of potassium permanganate, stone finishing, and sand blasting, replacing these with laser technologies, ozone, various alternative chemicals to replace potassium permanganate, and eco-stones.

Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM) prohibited the use of conventional electroplating. AGI DENIM has been working on its supply chain to procure metal trims from vendors who have eliminated electroplating and use removable buttons to enable jeans recycling.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify it with Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS).

Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM) sourced cellulose-based fibres from organic methods, and verified it with Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS).

d. Include post-consumer recycled content

Aimed to include 5-20% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by Global Recycled Standard (GRS) and Recycled Claim Standard (RCS).

Artistic Fabric & Garment Industries (Pvt.) Ltd. (AGI DENIM) included 5-20% post-consumer recycled content on average (by weight) of the total fabric composition. Depending on the orders, they produced jeans with a share of post-consumer recycled content varying between 5% and 20%. Verified this by Global Recycled Standard (GRS) and Recycled Claim Standard (RCS).

Artistic Denim Mills

Headquarters
Karachi, Karachi City, Sindh, Pakistan

Website
https://www.admdenim.com/

Product launch
N/A

Category

Organisation description

ADM is a vertical set-up and one of the key players for bringing innovations unique to the denim market. Over the years, we have dedicated ourselves for creating an optimized facility. We are at the forefront of sustainability by using eco-friendly raw materials and processes like ozone, laser, green chemicals, recycled water, eco-friendly fibers like recycled cotton, recycled polyester, organic cotton, and sustainable viscose.

Our onsite energy generation through solar helps us offset our carbon footprint. Water treatment and recycling is done to maintain quality and cleanliness to the environment. ADM has a recycling plant for converting old Denim Jeans and industrial textile waste into cotton fiber that is blended with new cotton for making new fabric and garments. We are also working on ZDHC program and committed to eliminating hazardous chemicals from our production waste. Working with Ellen MacArthur Foundation is an opportunity for us to contribute towards a circular economy and our vertical set up resonates with The Jeans Redesign project guidelines.

Contact

Mr. Faisal Ahmed, CEO, ADM – Artistic Denim Mills Ltd

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Artistic Denim Mills produced the total volume of jeans (in accordance with the Guidelines) initially committed to by May 2021. Volumes have been submitted to the Foundation only. Artistic Denim Mills has submitted a collection based on The Jeans Redesign guidelines to a The Jeans Redesign signatory brand, that initially liked the samples and modified it based on their requirements.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet ADM – Artistic Denim Mills Ltd's minimum test standard for jeans, which is:

- Colour Fastness to Washing ISO 105-C06
- Colour Fastness to Rubbing ISO 105-X12
- Tear Force ISO 13937-1
- Tear Force(Tongue) ISO 13937-2
- Tensile Strength (Grab) ISO 13937-2
- Seam Slippage ISO 13936-1
- Seam Strength 13935-2
- Pilling Resistance IDO 12945-2
- Fabric Weight ISO 12127-1
- Elastic Behavior ISO 14704-1 Method A
- pH ISO 3071
- Stretch and Recovery ASTM D 3107
- Domestic Washing and Drying Cycle ISO

Aimed to verify this by SGS and/or Intertek testing.

ADM – Artistic Denim Mills Ltd tested jeans for 30 home laundries and performed 11 tests (Tensile / Tear / Abrasion / Twisting / Dimension Stability / Seam Slippage / Stretch & Recovery / Ph Value / Color Fastness To Washing, Rubbing & Perspiration). This was verified by ADM's internal LAB. ADM did not verify SGS and/or Intertek testing, however they can share third party test reports of all these parameters after final selection from customers.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Wash inside out
- Wash with like colour

Aimed to verify this by the presence of a care label attached to the garment, claiming that washing instructions will remain visible after 30 home laundries.

ADM – Artistic Denim Mills Ltd exceeded their aim and the minimum requirement by including an easily accessible label with the following information:

- Wash on 30 degree temperature or below
- Medium temperature iron when needed
- Do not tumble dry
- Wash with similar colors and inside out
- Natural fade in color over time is expected
- Only non chlorine bleach when needed
- Additional environment care label on less washing/donate/recycle.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by the content analysis testing method through SGS and/or Intertek.

ADM – Artistic Denim Mills Ltd ensured material composition met a 98% cellulosic minimum and verified this by the content analysis testing method through SGS and/or Intertek.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that is added to the fabric. Specifically, aimed to include metal trims that are easy to remove by cutting out.

ADM – Artistic Denim Mills Ltd ensured all additional materials added to the fabric were easy to disassemble. Specifically, ADM – Artistic Denim Mills Ltd included screw shank buttons which are easily removable by opening the screw.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

ADM – Artistic Denim Mills Ltd ensured metal rivets were removed entirely, by replacing them with bar tacks or embroidery.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

ADM – Artistic Denim Mills Ltd ensured The Jeans Redesign logo was used on care labels, by following logo guidelines received by The Jeans Redesign team.

e. Use technology that enables sorting

Aimed to use technology that enables sorting.

ADM – Artistic Denim Mills Ltd implemented a QR code on each garment for consumers to engage with the product and ultimately make it easier to recycle.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. ADM – Artistic Denim Mills Ltd aimed to verify this by being registered on ZDHC Gateway.

ADM – Artistic Denim Mills Ltd ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum.

ADM – Artistic Denim Mills implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. They verified this by publishing their ZDHC Testing Report on the ZDHC Gateway. Their ZDHC ID is A195GN68.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above).

ADM – Artistic Denim Mills ensured the wastewater volume created for denim fabric was a maximum of 0.025m3/yard. In particular, they reported 0.0143 m3/yard to be the maximum volume of wastewater generated.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of the conventional electroplating, potassium permanganate, stone finishing, and sand blasting, and to verify this requirement through impact scoring softwares such as EIM (Environmental Impact Measuring) software.

ADM – Artistic Denim Mills Ltd prohibited the use of the chemicals and processes above, and verified this through the EIM (Environmental Impact Measuring) software.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS) Transition Certificate for Organic Cotton products.

ADM – Artistic Denim Mills Ltd sourced cellulose-based fibres from organic methods and verified this by Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS) Transition Certificate for Organic Cotton products. In addition, ADM – Artistic Denim Mills Ltd sources e3 cotton from BASF for some of their products.

d. Include post-consumer recycled content

Aimed to include 5% to 20% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. Aimed to verify this by Global Recycled Standard (GRS) and Recycled Claim Standard (RCS).

ADM – Artistic Denim Mills Ltd included 5% post-consumer recycled content on average (by weight) of the total fabric composition, and verified this by Global Recycled Standard (GRS) and Recycled Claim Standard (RCS).

Artistic Milliners

Headquarters
Korangi Industrial Area, Karachi, Pakistan

Website
https://www.artisticmilliners.com/

Product launch
N/A

Category

Organisation description

Artistic Milliners is a global denim powerhouse with a strong focus on automation, innovation, research, people and planet. With a legacy of more than 70 years, Artistic Milliners is a multi-faceted, vertically integrated denim and garment manufacturer with dedicated spinning, denim and garment manufacturing. Headquartered in Karachi, Pakistan, Artistic Milliners has a growing global presence in Dubai and the United States. The company embraces sustainability at all levels: climate action, water conservation, circular economy, gender equity and workers' wellbeing. The company recycles 85 percent of water in all its major mills and laundries and has installed solar panels for clean energy production. Artistic Milliners has the highest-rated LEED platinum facility in Pakistan and also earned the country's first FairTrade certification in the denim sector. The company's investment in sustainable cotton, Milliner Cotton, is a holistic project that aims at addressing scalability, traceability, and women empowerment across the cotton supply chain. Its renewable energy venture, Artistic Energy, supplies 100 MW of clean energy to Pakistan's grid, providing electricity to more than 50,000 households in underdeveloped communities. Artistic Milliners was named the UN SDG Pioneer for Gender Equality and Decent Work in 2019. The Financial Times named Artistic Milliners a Global Champion of Women in Business. The company was also profiled by the World Bank Group's IFC organization in its Advancing Women in Business Leadership & Management case study. Following IFC's Guidelines, Artistic Milliners is implementing family friendly policies for its employees. Artistic Milliners' sustainability initiatives are supported by brand partners across the globe. The company and its customers have worked together on programs such as the Workers' Wellbeing Initiative; the PACE program; and the Carbon Leadership initiative; as well as Pakistan's first post-consumer waste fabric production in 2014.

Contact

Omer Ahmed, CEO, Artistic Milliners

Murtaza Ahmed, Managing Director, Artistic Milliners

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Artistic Milliners did not meet their commitment and have not produced any jeans (in accordance with the Guidelines) by May 2021. This was due to the lack of order for such products from brands. Artistic Milliners has conducted in-house trials and formulated prototypes ready for production. Demand did not support the roll-out and Artistic Milliners eagerly awaits order from brand partners as research and production planning work has been already done.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Artistic Milliners' minimum test standard for jeans, which is:

- Abrasion Resistance (BS EN ISO 12947-2)
- Colour fastness (ISO 105 X12 / ISO105 C06 / ISO 105 E04 / ISO 105 E01)
- Dimensional Stability (ISO 6330)
- Tensile Strength (ISO 13934-1 / ISO 13934-2) (ASTM 5034)

Aimed to verify this by in-house facility for testing for home laundry washes.

Artistic Milliners did not test jeans for 30 home laundries and did not perform four durability tests (Abrasion Resistant, Tensile Strength, Dimensional Stability (ASTM); Colour Fastness (ISO)) to meet their minimum test standard for jeans, as they haven't produced any jeans yet.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying.

Aimed to verify this by a third party who will check care labels of garments.

Artistic Milliners did not include an easily accessible label with the information stated above, and did not verify it by a third party, as they haven't produced any jeans yet. However, they are on track to meet this requirement for future orders of jeans in accordance with The Jeans Redesign guidelines.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by AM Lab which is accredited by BV Labs and ITS.

Artistic Milliners did not ensure material composition met a 98% cellulosic minimum, and did not verify this by AM Lab which is accredited by BV Labs and ITS, as they haven't produced any jeans yet. However, they are on track to meet this requirement for future orders of jeans in accordance with The Jeans Redesign guidelines.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

Artistic Milliners did not enable easy disassembly of any additional materials that are added to the fabric, as they haven't produced any jeans yet. However, they are on track to meet this requirement for future orders of jeans in accordance with The Jeans Redesign guidelines. They are currently exploring the possibility to achieve a more modular design.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Artistic Milliners did not ensure metal rivets were removed entirely or reduced to a minimum, as they haven't produced any jeans yet. However, their R&D team is currently exploring ways to minimize the number of rivets for future orders of jeans in accordance with The Jeans Redesign guidelines.

d. Use The Jeans Redesign logo

Not applicable, use of The Jeans Redesign logo is down to brand approval.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

However, they are currently exploring a technology with Laroche to identify recycling and sorting machinery.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

Artistic Milliners did not ensure jeans use chemicals that comply with Level 1, ZDHC MRSL and did not verify this through the ZDHC Gateway, as they haven't produced any jeans yet. However, they are on track to meet this requirement for future orders of jeans in accordance with The Jeans Redesign guidelines.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by reporting wastewater data through the ZDHC Gateway.

Artistic Milliners did not implement the ZDHC Wastewater Guidelines and did not verify this by reporting wastewater data through the ZDHC Gateway, as they haven't produced any jeans yet. However, they are on track to meet this requirement for future orders of jeans in accordance with The Jeans Redesign guidelines.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum.

Artistic Milliners did not ensure the wastewater volume created was a maximum of 0.025m3/yard and did not treat it to specifications a2 (above), as they haven't produced any jeans yet. However, their wastewater per yard of jeans is minimal as they continue to minimize the use of water and generation of waste water in their processes. In particular, in 2020 their wastewater usage has been 0.024m3/yard.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting.

Artistic Milliners did not prohibit the use of all the above stated processes, as they haven't produced any jeans yet. However, they are on track to meet this requirement for future orders of jeans in accordance with The Jeans Redesign guidelines, by adopting the following measures:

a. Certificate from zippers, rivets and button manufactures confirming no use of electroplating process

b. Use of lasers instead of potassium permanganate.

c. Use of rubber stones instead of pumice stones.

d. No use of sand blasting

Aimed to verify this by the ZDHC Gateway, EIM (Environmental Impact Measuring) software and GAP Inc. Sand Blasting Policy, which bans sand blasting.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS) Transition Certificate for Organic Cotton products.

Artistic Milliners did not source cellulose-based fibres from organic methods, and did not verify this by Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS) Transition Certificate for Organic Cotton products, as they haven't produced any jeans yet. However, they are on track to meet this requirement for future orders of jeans in accordance with The Jeans Redesign guidelines.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

Blue Design America

Headquarters
San Lorenzo, Paraguay

Website
http://www.bdadenim.com/

Product launch
N/A

Category

Organisation description

Our main driver is to develop the most sustainable, reliable and creative products in our region to a global scale. In 2013, Blue Design took the commitment to be a model company. This commitment was solidified not only by building the first and only LEED Silver Certified Industrial Building in all of America, but also with our production. Since then, we´ve been going deeper and deeper into innovation processes that would allow us to elaborate 100% sustainable jeans with organic fibers, certified organic and eco-friendly chemicals, Ozone and laser to replace stonewash and excellent quality. These aspects were the ones that had BDA leading the trends in our markets in a hegemonic way throughout the years since our establishment and it is what positioned the company as the main jeans manufacturer in all of the Mercosur, with later immersions into the European and US markets in alliance with some very important brands, from which we learned about The Ellen MacArthur Foundation. When we heard about The Jeans Redesign from Ellen MacArthur Foundation, it was the opportunity that we were looking for. An initiative where we could show to the world what we are able to do, and at the same time participate and be part of an incredible project to improve the jeans production in compliance with the solutions that we believe to be the answer to the industry's future problems. Circular economy is the future.

Contact

Jorge Bunchicoff, President, BLUE DESIGN AMERICA

Joaquin Sandoval, Sustainability and CSR Responsible, BLUE DESIGN AMERICA

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Blue Design America produced 25% of the total volume of jeans (in accordance with the Guidelines) initially aimed to by May 2021. Volumes have been submitted to the Foundation only. This was because, as it is their first participation, Blue Design America had to involve all their commercial partners into the guidelines. Most of their regional clients are still stunt after the lockdown and are restarting their productions. Although commercial planification with clients had already closed, Blue Design America managed to set some productions under the guidelines with a brand in the US. Blue Design America hopes to have a major impact in their partners in future editions, since they made clear the importance and benefits of responsible productions taking into consideration recyclability, traceability, material health, and durability.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Blue Design America's minimum test standard for jeans, which is:

- Abrasion resistance ISO 12947-2
- Dimensional changes of garments after home laundering AATCC 150
- Tensile strength - grab test ASTM D5034
- Tearing strength - elmendorff test ASTM D1424-09
- Colour fastness to actual laundering AATCC 150 (Multifiber 10)
- Pilling after home laundering ASTM D4970
- Seam strength ASTM D1683-17

Aimed to verify this by an accredited third party lab (e.g. SGS, Intertek, Bureau Veritas)

Blue Design America tested jeans for 30 home laundries and performed seven durability tests (as stated above) to meet their minimum test standard for jeans, verified by Bureau Veritas.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by an accredited third party lab (e.g. SGS, Intertek, Bureau Veritas)

Blue Design America included an easily accessible label with the information stated above, verified by a QR code that will be pad printed on the pockets linings or in the hangtag; this QR will redirect the customer to a website where they will find information and methods to save water, reduce washing frequency, and use energy in a more responsible way.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by composition test performed by an accredited lab (SGS, Intertek, BV).

Blue Design America ensured material composition met a 98% cellulosic minimum and verified this by sourcing a determined Global Organic Textile Standard (GOTS) certified fabric provided by ORTA, which is 100% organic cotton. They also purchased 100% OCS pocket linings, all of this to use the remaining 2 % on threads, labels, and buttons.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. Initially aim to enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.) by including bar tacks instead of metal rivets, wooden buttons, and organic cotton or recycled polyester labels. Blue Design confirmed it was easy to remove by performing a simple tearing or cut with the help of scissors.

Blue Design America ensured any additional materials added to the fabric were easy to disassemble. This was ensured by designing easy-to-remove trims along with their suppliers. Such easy-to-remove buttons can be cut easily once the garment is collected for recycling.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Blue Design America ensured rivets were removed entirely by using bar tacks instead of metal rivets.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Blue Design America ensured The Jeans Redesign logo was used, by including in hangtag and care label.

e. Use technology that enables sorting

Not applicable, use of technology that enables sorting is down to brand approval.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Blue Design America aimed to verify this through the ZDHC Gateway.

Blue Design America ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through entering ZDHC and checking compliance themselves. All of their chemicals comply with Level 1 ZDHC MRSL. For chemicals that are not in the Gateway, they asked for OEKO TEX or third party assessments to guarantee compliance.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by Bluesign, which will be using alternative and sustainable methods, such as Laser, Ozone, and organic chemicals to replace bleaching and potassium permanganate.

Blue Design America prohibited the use of the chemicals and processes above and verified this through organic certified (GOTS and Bluesign) chemicals that achieve the desired look.

Blue Design America prohibited the use of conventional electroplating, replacing it by working with their trim suppliers which guaranteed no electroplating was done to the trims and zippers.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS) certificates (provided by vendors).

Blue Design America sourced cellulose-based fibres from organic methods and verified this through a Global Organic Textile Standard (GOTS) Certified fabric provided by a The Jeans Redesign participant mill, which is 100% organic cotton. They also purchased 100% Organic Content Standard (OCS) pocket linings.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

Creative Knits

Headquarters
Karachi, Karachi City, Sindh, Pakistan

Product launch
N/A

Website
http://creativeknits.net/

Category

Organisation description

At Creative Knits we are guided by the principles to lead, innovate, and excel through our practices. Established in 2002, our journey so far has been focused on building our capabilities and amassing a talented team to understand and fulfill the needs of our clients.

Our expertise in both Knits and Woven products allows us to service a full range of products and cater to a wide range of clients. All in all we are driven by a desire to continuously improve, empower and innovate. We are grateful to be a part of this initiative and wish to expand our efforts across all our product types in the near future.

Contact

Danyal Lakdawala, Product Development and Director, Creative Knits

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Creative Knits aimed to produce jeans in accordance with the Guidelines but did not produce any volume of such jeans by May 2021. They did not produce any jeans because their customer base has specific programs in place with them, and so far they haven't placed anything in line with The Jeans Redesign guidelines.

However, they do plan on producing a small batch later in the year.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Creative Knits's minimum test standard for jeans, which involves conducting various dimensional, appearance and performance testing. Aimed to verify this by a third party.

Creative Knits did not test jeans for 30 home laundries as they have not produced any jeans yet.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by in-house quality and care management team.

Creative Knits did not include an easily accessible label with the information stated above, as they have not produced any jeans yet.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by a third party test, as well as through EIM (Environmental Impact Measuring) software reports.

Creative Knits did not meet 98% cellulosic minimum material composition and they did not verify this, as they have not produced any jeans yet.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The Jeans will include labels and trims that are easily removable and the Organisation confirms it is easy to remove by performing the following dismantling.

Creative Knits did not ensure any additional materials added to the fabric were easy to disassemble, as they have not produced any jeans yet.

c. Remove rivets entirely or reduce them to a minimum

Aimed to reduce metal rivets to a minimum. They will also be easily removable.

Creative Knits did not ensure metal rivets were reduced to a minimum, as they have not produced any jeans yet. Their aim is to not to use metal rivets on the jeans at all. In case a brand requires them, they will get in touch with certified suppliers to source removable rivets.

d. Use The Jeans Redesign logo

Not applicable, use of The Jeans Redesign logo is down to brand approval.

e. Use technology that enables sorting

Not applicable, use of technology that enables sorting is down to brand approval.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Creative Knits aimed to verify this through the ZDHC Gateway.

Creative Knits did not ensure jeans use chemicals that comply with Level 1, ZDHC MRSL and did not verify this through the ZDHC Gateway, as they have not produced any jeans yet. However, they are currently using sustainably sourced, harm-free chemicals from Officina+39 and Dystar.

b. Prohibit the following chemicals or processes:
a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by ZDHC Gateway and by requesting relevant certification from the laundries and facilities that are going to be a part of the production process.

Creative Knits did not prohibit the use of the chemicals and processes above, as they have not produced any jeans yet.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this through Organic Content Standard (OCS) and Global Organic Textile Standard (GOTS).

Creative Knits did not source cellulose-based fibres from organic methods and did not verify this through Organic Content Standard (OCS) and Global Organic Textile Standard (GOTS). as they have not produced any jeans yet.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

Crescent Bahuman

Headquarters
Gulberg V, Lahore, Punjab, Pakistan

Website
https://www.crescentbahuman.com/

Product launch
N/A

Category

Organisation description

Crescent Bahuman Limited (CBL) is south-east Asia's first vertically integrated denim production facility. The project started in 1992, when 600 acres of marshland was recovered and converted into a vibrant, self-sustaining Ecosystem. Sustainability is central to the foundation of Crescent Bahuman Limited, ever since the beginning we have been challenging the conventional approaches and thrive towards sustainable practices.

The Jeans Redesign is a platform that emphasizes sustainability and recyclability keeping in view both manufacturer and consumer ends. CBL believes it is our obligation to participate in such initiatives and keep on working for a better and sustainable future, moreover this program will further strengthen us in achieving our sustainable business development goals.

Contact

Mr. Rizwan Shafi, Executive Vice President, Crescent Bahuman Limited

JEANS PRODUCED ACCORDING TO THE GUIDELINES

CBL produced the total volume of jeans (in accordance with the Guidelines) initially committed to by May 2021. Volumes have been submitted to the Foundation only. CBL has always been using conscious manufacturing practices, and most of the guidelines were not hard to comply with for the organisation. The only difficulties were encountered when having to deal with customer's protocols.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet CBL's minimum test standard for jeans, which is:

- Dimensional stability ISO 6330
- Tensile force ASTM D 5034
- Seam force ASTM D 1683
- Tear strength ASTM D 1424
- Colour fastness to perspiration ISO 105 - E04
- Colour fastness to water ISO 105 - E01
- Stretch and recovery ASTM D 3107

CBL tested jeans for 30 home laundries and performed seven durability tests to meet their minimum test standard for jeans (dimensional stability, tensile force, seam force, tear strength, colour fastness to perspiration, colour fastness to water, stretch and recovery). CBL performs these tests as per their standard practices and customer's demand in their in-house established lab, so it has not been difficult to meet this requirement. These tests are standard ISO and ASTM certified and can be evaluated by a third party testing services at any time by customer.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Wash inside out
- Natural fading of colour with time and exposure is expected

This information is subject to the information provided from the brands, as a manufacturer the care instructions are as per brands instructions and most of these instructions are already provided on care labels.

CBL included an easily accessible label with the information stated above. This information is attached on every garment they produce and is inspected with garment quality checklist.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by content analysis testing method: Deviation of Fibre content ISO 1833. Additionally weight of all components of garment can be verified by a third party accredited QA testing labs.

CBL ensured material composition met a 98% cellulosic minimum and verified this using content analysis testing. The weight of all components of the garment can be verified by a third party accredited QA testing labs.

b. Enable easy disassembly of any additional components added to the fabric

Did not aim to enable easy disassembly of any additional materials that are added to the fabric.

CBL developed garments with easily detachable metal buttons and rivets to ensure any additional materials added to the fabric were easy to disassemble. However, this depends on the customer's requirements so CBL cannot implement it at full scale. In particular, CBL has used sustainable steel trims as these are recyclable, as well as trim attachments using screws that allow easy removal.

c. Remove rivets entirely or reduce them to a minimum

Did not aim to remove metal rivets entirely or reduce them to a minimum.

As a third party manufacturer, CBL cannot eliminate rivets entirely but are developing garments with no metal rivets in their R&D. This is being developed by using bar tack designs in place of rivets.

d. Use The Jeans Redesign logo

Not applicable, use of The Jeans Redesign logo is down to brand approval.

CBL did not ensure The Jeans Redesign logo was used, since they are a third party manufacturer, using the logo depends entirely on the brand's choice.

e. Use technology that enables sorting

Not applicable, use of technology that enables sorting is down to brand approval.

However, CBL is initiating pilots for traceability and sorting. For example, CBL is calculating a feasibility of blockchain technology in order to make their information transparent, and they are in pilot discussions with Haelixa and Oritain, as well as other traceability initiatives.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. CBL aimed to verify this through the ZDHC Gateway.

CBL ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through ZDHC certification.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum.

CBL implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. They verified this by being audited biannually and the report is published on the ZDHC portal.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above).

CBL ensured the wastewater volume created for denim fabric was a maximum of 0.025m3/yard. In particular, their average water consumption in 2021, to date, was 0.0212m3/yard. In addition, the hot water that they are using is already a by-product from their power generators, used to cool down the engines.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by

a. Certificates provided from zippers, buttons, and rivets manufacturers confirming no use of electroplating.

b. We will use laser techniques and laser friendly fabrics to ensure no PP is required.

c. Alternate Rubber Stones will be used instead of Pumice Stone and high activity enzymes will also be used.

d. Sand blasting is not used in their process.

Aimed to verify this through the ZDHC Gateway. In addition to the material safety data sheet (MSDS) provided by their chemical providers, and world renowned certifications like OEKO-TEX 100, CBL are also using EIM (Environmental Impact Measurement) software to ensure low environmental impact.

CBL prohibited the use of potassium permanganate and sand blasting. Specifically, CBL has been using LASER and OZONE treatments in their laundry to eliminate sand blasting and potassium permanganate. CBL reported that this process has been more costly and time consuming than traditional processes. Certificates from zipper manufacturers, laser friendly fabrics, ZDHC certificate also prove that their are not using sand blasting.

CBL prohibited the use of conventional electroplating by purchasing metal trims from suppliers that make them without the use of electroplating.

CBL did not prohibit stone finishing, but is in the process of eliminating stone finishing from their processes, using rubber stones and alternate stones. This was due to the presence of natural minerals in pumice, which makes it difficult to achieve the same result with other alternatives. However, they are experimenting on bio rubber stones, synthetic abrasion pads, plastic stones, and high efficacy enzymes.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS).

CBL sourced cellulose-based fibres from organic methods and verified this through the Global Organic Textile Standard (GOTS).

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

However, they are in the experimenting stage for inclusion of different post-consumer and postindustrial waste. At the time of publication, CBL has imparted at least 5% recycled content in their overall production and aims to increase it further in the coming months.

Cross Textiles

Headquarters
Bağcılar/İstanbul, Turkey

Website
https://crosstextiles.com/

Product launch
N/A

Category

Organisation description

Cross Textiles is a family business in the third generation, based in Istanbul, Turkey. Established in 1939, we have made jeans since 1975 and we supply many of the largest brands in Europe and North America. We have always invested in technology for a brighter future and today is no different. On our path from linear to circular, we recognize our responsibility. Not only environmentally, but also socially. Cross Textiles is joining The Jeans Redesign project because we see the importance of contributing to change. Going from linear to circular is not easy for the fast fashion brands that we collaborate with and neither is it easy for us as a manufacturer.

The Jeans Redesign project is a framework that promotes collaboration among stakeholders, which we embrace and support. We see The Jeans Redesign project by the Ellen MacArthur Foundation as a great opportunity for us to challenge the way jeans are designed. We also believe that it will help both customers and suppliers to make jeans, the one garment that can be found in everyone's wardrobe, in a better way.

Contact

Peter Lantz, Head of Sustainability, Cross Textiles

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Cross Textiles produced a fraction of the total volume of jeans (in accordance with the Guidelines) initially aimed to by May 2021. Volumes have been submitted to the Foundation only. This was due to the fact that the company joined the project late and did not manage to put the correct collaborations into action to meet the deadline. However, they produced and sold one collection of jackets that fulfilled The Jeans Redesign requirements.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 50-100 home laundries and retain their ability to meet Cross Textiles' minimum test standard for jeans, which is:

- Quality testing according to standards at Cross Textiles (approved by H&M, Inditex, Bestseller and more including ISO standards) and beyond to fulfil project guidelines.
- Pre-Production: Tear strength, tensile strength, abrasion resistance, colour fastness, dry rub, wet rub, and dimension stability.
- Post-production: Wash and wear tests.

Cross Textiles exceeded this The Jeans Redesign requirement by testing jeans for 50 home laundries, and they performed nine durability tests (tear strength, tensile strength, abrasion resistance, colour fastness, dry rub, wet rub, dimension stability, wash and wear tests) to meet their minimum test standard for jeans.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Instructions to wash at higher temperatures where applicable

Aimed to verify this by quality assurance standards at Cross Textiles.

Cross Textiles did not include an easily accessible label with the information stated above as the collection, whose specifications are in accordance with The Jeans Redesign guidelines, was produced before the organisation officially joined the project. However, Cross Textiles are considering several options at the moment and leaning towards a high-quality woven label including both text and a QR-code.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by fabric partner declarations including Global Organic Textile Standard (GOTS).

Cross Textiles ensured material composition met a 98% cellulosic minimum. In particular, their fabric was made of Lenzing fibres, woven and dyed by Isko. For this specific order, the jacket was delivered without wash.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

Aimed to include metal buttons and potentially RFID tags depending on partner requests.

Aimed to make disassembly self explanatory. Not only before use, but also after the jeans have been heavily worn (i.e. through the type of trims and other additional materials added).

Cross Textiles ensured additional materials added to the fabric were easy to disassemble. In particular, all additional materials could be disassembled in a conventional way apart from branding made with cotton thread as embroidery instead of the usual label derived from petroleum based products. This is an area where they seek further collaboration.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Cross Textiles ensured metal rivets were removed entirely.

d. Use The Jeans Redesign logo

Not applicable, use of The Jeans Redesign logo is down to brand approval.

Cross Textiles reported that if they do use it in future, they will use laser.

e. Use technology that enables sorting

Not applicable, use of technology that enables sorting is down to brand approval. However, they have experience in RFID and are now exploring other tracing techniques further.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Cross Textiles aimed to verify this through the ZDHC Gateway.

Cross Textiles ensured jeans used chemicals that comply with Level 1, ZDHC MRSL, as they used no chemicals or washes at all during the manufacturing of the product.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by quality assurance according to standards at Cross Textiles including "open book" practises where all steps in production are documented.

Cross Textiles prohibited the use of the chemicals and processes above, as they did not use any chemicals or washes within their collection in accordance with The Jeans Redesign guidelines.

In particular, at an organisational level:

- Cross Textiles prohibited sand blasting and it is not in use.
- Cross Textiles did not prohibit electroplating, but have expertise in pure copper, non galvanized metal trims in collaboration with Metal Bottoni.
- Cross Textiles did not prohibit potassium permanganate, but have experience in double laser treatments in collaboration with Jeanologia and alternative chemicals in collaboration with Garmon, among other techniques. For all finishes except the visually strongest bleach effects, they are now able to use alternative processes and technologies.
- Cross Textiles did not prohibit stone finishing, but have developed their own synthetic stones in collaboration with Universities in Turkey and they are currently mostly using a synthetic stone that performed the best according to their research.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by a third party certifications (as they do already), for example Global Organic Textile Standard (GOTS) which they are certified for. At length their ambition is to collaborate with fabric partners in setting and achieving KPIs together with stakeholders in tiers 3 and 4.

Cross Textiles sourced cellulose-based fibres from organic, regenerative, or transitional methods and verified this through their fibre supplier Lenzing, which is ranked with more than 25 "buttons" in the Canopy Hot Button Report. Looking forward, they have a focus on regenerative farming in Turkey.

d. Include post-consumer recycled content

Aimed to include up to 20% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by fabric partner declarations.

Cross Textiles did not meet their aim to include post-consumer recycled content in their collection in accordance with The Jeans Redesign guidelines.

Crystal Group

Headquarters
Kowloon, Hong Kong

Website
https://www.crystalgroup.com/

Product launch
N/A

Category

Organisation description

Founded in Hong Kong in 1970, Crystal International Group is a global leader in the apparel manufacturing industry, which has a diversified product portfolio categorised in five segments, including lifestyle wear, denim, intimate, sportswear and outdoor apparel, and sweater. With a workforce of approximately 80,000, the Group operates a multi-country manufacturing platform spanning five countries: Vietnam, China, Cambodia, Bangladesh and Sri Lanka. Crystal International has a genuine focus on sustainability. We were ranked 17th out of 50 in the Fortune business magazine "Change the World" list in 2016, which recognises companies across the globe that have made significant social and environmental contributions through their strategy and operations. All our manufacturing facilities adopt ZDHC Wastewater Guidelines and MRSL to eliminate the use of hazardous chemicals. Our Denim Division specializes in sustainable washing, laser technologies, ozone bleaching and EIM measurement for denim finishing, with a number of sustainability certifications such as Higg Index, BCI, GOTS, RCS, Better Work, etc., along the production line from sourcing, production process to end-products. A circular economy model is one of our steadfast and long-term ambitions. To pool efforts and shape the industry towards circular fashion, Crystal International is proud to join the Ellen MacArthur Foundation's The Jeans Redesign project. The approach of The Jeans Redesign sets out a sensible foundation to propel sustainable denim design and production covering a variety of aspects. This can further bring us to engage with the different industry peers for developing a new textiles economy. We believe that The Jeans Redesign products can drive positive impact to workers' health and the environment throughout the lifecycle, promote the use of sustainable materials in a circular and traceable way.

Contact

Catherine Chiu, General Manager - Corporate Quality and Sustainability, Crystal International

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Crystal Group aimed to produce jeans in accordance with the Guidelines and produced a volume of such jeans, as initially committed, by May 2021. Volumes have been submitted to the Foundation only.

Crystal Group confirmed The Jeans Redesign orders with the buyers, who are The Jeans Redesign participants as well, that production processes were in accordance with the Guidelines.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Crystal International Group Limited's minimum test standard for jeans, which is:

- Tensile strength test ASTM D5034
- Tear strength test ASTM 01424
- Abrasion Resistance ASTM D4966
- Seam Strength ASTM D1683

Crystal International Group Limited tested jeans for 30 home laundries and performed four durability tests (Tensile strength test ASTM D5034, Tear strength test ASTM 01424, Abrasion Resistance ASTM D4966, Seam Strength ASTM D1683) to meet their minimum test standard for jeans.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Instructions to turn the garment inside out before washing.

Aimed to verify this by: presence of care label on the product.

Crystal International Group Limited included an easily accessible label with the information stated above, verified by a label which includes the following information: Information on reducing washing frequency, Instructions to wash at low temperatures (30 degrees or below), Instructions to avoid tumble drying and (Optional according to the brands style): Instructions to turn the garment inside out before washing.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by fibre composition disclosed on Care and Content label.

Crystal International Group Limited ensured material composition met a 98% cellulosic minimum and verified this by fibre composition disclosed on Care and Content label.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The jeans will include trims and Crystal International Group Limited confirms it is easy to remove by pre-processing for recycling.

Crystal International Group Limited ensured any additional materials added to the fabric were easy to disassemble, for example the trims could be easily removed by pre-processing for recycling.

c. Remove rivets entirely or reduce them to a minimum

Aimed to reduce metal rivets to a minimum.

Crystal International Group Limited exceeded their aim and removed rivets completely. Instead, they processed bartacks on the corresponding positions. Verified this through the production tech-pack as supporting evidence.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Crystal International Group Limited ensured The Jeans Redesign logo was used, by presenting it on the product.

e. Use technology that enables sorting

Not applicable, use of technology that enables sorting is down to brand approval.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Crystal International Group Limited aimed to verify this through the ZDHC Gateway and the corresponding ZDHC Conformance Certificates.

Crystal International Group Limited ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway and the corresponding ZDHC Conformance Certificates.

b. Prohibit the following chemicals or processes:
a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by showing the wash recipe of what is used in the production process.

Crystal International Group Limited prohibited the use of the chemicals and processes above and verified this through with the production tech-pack, the wash recipe, and the necessary onsite inspection by their buyers' quality assurance (QA) specialist.

Crystal International Group Limited prohibited the use of conventional electroplating. In particular, they procured metal shanks (Eco version) through Restricted Substance List (RSL) certified trims suppliers.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by use of certified organic fibres (Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS)).

Crystal International Group Limited sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS).

d. Include post-consumer recycled content

Aimed to include 5% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by use of certified recycled fibres Recycled Claim Standard (RCS).

Crystal International Group Limited did not include post-consumer recycled content and did not verify this through use of certified recycled fibres Recycled Claim Standard (RCS). Since it is an optional requirement, at this moment, they haven't brought RCS to their The Jeans Redesign products. Yet, as all of Crystal International Group Limited's facilities are RCS certified, they are actively suggesting buyers to do so.

DEMCO

Headquarters
Moknine-Monastir, Tunisia

Website
https://www.demcointer.com/

Product launch
N/A

Category

Organisation description

DEMCO is a manufacturer for DENIM and knitwear that was founded in 1991 in Tunisia (Monastir, Moknine industrial area). In 2018, we had a turnover of 78 Mi EUR and presently count 20 Companies with 4 500 employees. Certifications that we have achieved include Fairtrade, GOTS, GRS, Higg, Oeko-tex. DEMCO group is committed to sustainability and we are voluntary offsetting of total CO2eq emissions. Our waste management includes not only sorting, collecting & recycling but also 100% wastewater treatment of which 80% is recycled. Additionally, 25% of energy needs are covered by 1532 solar panels, our water consumption reduced by 93%, our chemicals usage by 50% and our energy consumption by 35%.

Contact

Alison De Meirsman, Head of Design, DEMCO

JEANS PRODUCED ACCORDING TO THE GUIDELINES

DEMCO produced the total volume of jeans (in accordance with the Guidelines) initially committed to by May 2021. Volumes have been submitted to the Foundation only. The garments produced by DEMCO (in accordance with the Guidelines) have been sold to a brand that is part of the Ellen MacArthur Foundation's network.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet DEMCO's minimum test standard for jeans, which is:

- Showcasing the differences in a jeans that are washed 5 times, 10 times, 15 times, 20 times, 25 times and 30 times with a subsequent tearing strength test
- Waiting for other tests to be realised

Did not aim to verify this.

DEMCO tested jeans for 30 home laundries and performed one durability test (NF EN ISO 13937-1 tear test) to meet their minimum test standard for jeans, verified by tests carried out by a third party independent lab.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Wash your jeans every 2 weeks

Aimed to verify this by: Pre Spring / Spring Summer 2021.

DEMCO included an easily accessible label with the information stated above, verified by the care label.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by the Global Organic Textiles Standard (GOTS), and/or Oekotex.

DEMCO ensured material composition met a 98% cellulosic minimum and verified this through the inside technical file, which indicates the type of fabric used, and the order file, which indicates the type of fabric used for a given order number.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. Aimed to use screw button by 2020. Aimed to use natural hardware by 2020.

DEMCO ensured any additional materials added to the fabric were easy to disassemble. To achieve this, they used screw buttons and natural hardware. Natural hardware means using hardware in their raw material (for example, raw copper, inox and leton for the metallic buttons, and pear wood for shirts). For back patches DEMCO used the same fabric as the garment and added embroidery or laser to replace the traditional leather back patches.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely.

DEMCO ensured rivets were removed entirely. They and replaced them with decorative bar tacks (geometrical shapes such as full and empty triangles, full and empty circles, etc.).

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

DEMCO ensured The Jeans Redesign logo was used, by printing on the garment.

e. Use technology that enables sorting

Not applicable, use of technology that enables sorting is down to brand approval.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. DEMCO aimed to verify this through the ZDHC Gateway. Presently, the chemicals list complies with the MRSL.

DEMCO ensured jeans use chemicals that comply with Level 1, ZDHC MRSL. DEMCO verified this through a chemical inventory in which it's specified for each chemical if it's registered on ZDHC gateway and its ZDHC level. A cross check between the recipe and the inventory can testify that chemicals used for The Jeans Redesign products are registered on the ZDHC gateway.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by Jeanologia's EIM (Environmental Impact Measuring) software.

- Potassium permanganate will not be used starting January 2020
- Pumice stones are replaced by eco-stones
- Sand blasting: stopped 10 years ago

DEMCO prohibited the use of the chemicals and processes above and verified this through the garment recipe, the garment cutting form (also called technical form), the waste register, and the Higg index. DEMCO avoided electroplating by using hardware in their raw material.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Global Organic Textile Standard (GOTS).

DEMCO sourced cellulose-based fibres from organic methods and verified this through the Global Organic Textile Standard (GOTS).

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. However, pre-consumer recycled content is available.

Ongoing tests are being made with post consumer content. Aimed to verify this by Global Recycled Standard (GRS).

Denim Clothing Company

Headquarters
Karachi, Sindh, Pakistan

Product launch
N/A

Website
https://denimclothingcompany.com/

Category

Organisation description

Founded in 2005, Denim Clothing Company (DCC) is Pakistan's premier denim garment manufacturing facility. Today, DCC caters to some of the most prominent high street and designer labels in the textile industry, with its products reaching over 50 countries globally. DCC has a mission to produce aspirational quality denim products through the utilization of latest technologies, employing sustainable processes, sourcing quality raw materials and following socially responsible practices.

DCC is committed to leading responsible initiatives in fully recycling and conserving water, reducing energy use to a minimum and eliminating the use of hazardous chemicals entirely within its production facility. The Jeans Redesign mirrors DCC's aims toward a more sustainable future for the textile industry. Participating in this initiative provides a tangible and meaningful way for DCC to contribute to the global efforts toward a circular economy.

Contact

Mariyah Farhan, Director, Denim Clothing Company

JEANS PRODUCED ACCORDING TO THE GUIDELINES

DCC aimed to produce jeans in accordance with the Guidelines and produced a volume of such jeans, as initially committed, by May 2021. Volumes have been submitted to the Foundation only.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet DCC's minimum test standard for jeans, which is:

- Colour Fastness to Water ISO 105-E01
- Colour Fastness to Perspiration ISO 105-E04
- Colour Fastness to Rubbing ISO 105-X12
- Colour Fastness to Ozone ISO 105-G03
- Colour Fastness to Light ISO 105-B02
- Single tear method ISO 13937-2
- Pilling Resistance ISO 12945-1
- Fabric Weight ISO 12127-1
- PH ISO 3071
- Stretch and Recovery D3107-07
- Domestic Washing and Drying Cycle ISO 6330
- Abrasion Resistance ISO 12947-2

Aimed to verify this through their in-house lab.

DCC tested jeans for 30 home laundries and performed 12 durability tests (listed above) to meet their minimum test standard for jeans, verified by tests performed at their Inhouse Lab. These are regular test protocols which DCC performs on each article order. Most clients request these tests to be performed on their product. However 30 home laundries is a lengthy test which also restricts product in following dimensions:

- Only heavier weight denim can qualify in the case of 98% cotton
- Dye fixations are required
- Dark Wash is difficult to handle

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by visual inspection of the garments.

DCC included an easily accessible inside care label with the information stated above, verified by visual inspection of the garments. In normal practice, all of DCC's customer's nominated care label instructions contain these guidelines. Thus, DCC didn't need to add anything extra.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by lab testing.

DCC ensured material composition met a 98% cellulosic minimum and verified this by lab testing.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable, did not aim to enable easy disassembly of any additional materials that is added to the fabric.

DCC converted concealed labels into hard security detachable tags.

c. Remove rivets entirely or reduce them to a minimum

Not applicable, did not aim to remove metal rivets entirely or reduce them to a minimum.

DCC did not ensure metal rivets were removed entirely or reduced to a minimum, as it is down to specifications from the brand customers.

d. Use The Jeans Redesign logo

Not applicable, use of The Jeans Redesign logo is down to brand approval.

DCC did not ensure The Jeans Redesign logo was used because it was not requested by customers.

e. Use technology that enables sorting

Not applicable, use of technology that enables sorting is down to brand approval.

DCC did not ensure technology that enables sorting was used because it was not requested by customers.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. DCC aimed to verify this through the ZDHC Gateway.

DCC ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway. Recently, DCC has started using level 3 chemicals for major clients, and they reported to be continuously improving in this segment.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to obtain declaration from metal trims manufacturers stating no use of electroplating process, use lasers as a substitute for potassium permanganate, obtain stone effects through use of E-Flow, Ozone and Enzymes (instead of stone finishing), and no Sand Blasting will be used. Aimed to verify this by EIM (Environmental Impact Measuring) software.

DCC prohibited the use of sand blasting.

DCC prohibited the use of potassium permanganate for The Jeans Redesign products. They have been conducting continuous research and development in this sector and trying out different chemicals as alternatives to potassium permanganate. Now they came closer to 20-25% of total sales without using potassium permanganate. DCC's aim is to eliminate potassium permanganate completely with the help of laser blasting and alternative potassium permanganate chemicals in the coming year.

DCC prohibited the use of stone finishing for The Jeans Redesign products, replacing it with stone free enzymes, nano bubbles and ozone. They are looking for the best alternative to stones to achieve the same abrasion effect. Their aim is to replace conventional pumice stones with eco stones completely, which are durable for 150 washes and minimize sludge in wastewater to a greater extent.

DCC did not prohibit the use of conventional electroplating. In this case, they are completely dependent upon their customer's choice and so far they haven't received any relevant nomination to procure such trims.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS) Transaction Certificates.

DCC sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS) Transaction Certificates.

d. Include post-consumer recycled content

Aimed to include 5% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by Global Recycle Standard (GRS) and/or Recycled Claim Standard (RCS) Transaction Certificates.

DCC exceeded their aim and included between 5-20% post-consumer recycled content (by weight). Now they are working on a mix of both post-consumer and pre-consumer recycled content and aiming to increase this percentage over time.

Denim Expert

Headquarters
Chattogram, Bangladesh

Product launch
N/A

Website
http://www.denimexpert.com/

Category

Organisation description

Denim Expert Limited is a niche denim manufacturing plant located in Chattogram, Bangladesh. Since its foundation in 2009, the company has become a benchmark in Bangladeshi denim manufacturing and washing. It boasts a fully integrated and sustainable production system, from high quality raw material to sewing and finishing, to meet growing demand of denim from discerning Western customers.

"We believe making the planet a better place to live in is a responsibility of all of us. From this self-responsibility, Denim Expert Limited has joined this initiative as we are committed to producing not only quality denims but also improving the quality of lives."

Contact

Mostafiz Uddin, Managing Director of Denim Expert Limited

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Denim Expert did not meet their commitment and have not produced any jeans (in accordance with the Guidelines) by May 2021. This was due to the COVID situation. However, they are in the process of producing them at the time of writing. Additionally, they reported that about 70% of their production and sales meets minimum sustainability credentials in terms of fibres and washes.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Denim Expert's minimum test standard for jeans, which is:

- Ability to achieve a rating of 3.0 after 30 Home laundry, test method AATCC 124 (3)
- Dimensional stability (ISO 6330)

Denim Expert did not test jeans for 30 home laundries. They did not perform two durability tests to meet their minimum test standard for jeans, as they haven't produced any jeans yet.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by garment testing companies SGS, BV, TÜV, ITS.

Denim Expert did not include an easily accessible label with the information stated above as they have not produced any jeans yet. However, they are on track to meet this requirement as their jeans production already has a care label with the instructions stated above.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by Authorized Company CERES.

Denim Expert did not ensure material composition met a 98% cellulosic minimum, as they haven't produced any jeans yet. However, they are producing 70% of their production with cellulose-based fibres which are authorized by CERES.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

Denim Expert did not ensure additional materials added to the fabric were easy to disassemble as they have not produced any jeans yet.

c. Remove rivets entirely or reduce them to a minimum

Aimed aim to remove metal rivets entirely or reduce them to a minimum.

Denim Expert did not ensure metal rivets were removed entirely or reduced to a minimum as they have not produced any jeans yet. During development they proposed to their customers solutions that used bar tack stitches instead of rivets, but still customers are not willing to adopt them.

d. Use The Jeans Redesign logo

Not applicable, use of The Jeans Redesign logo is down to brand approval.

e. Use technology that enables sorting

Not applicable, use of technology that enables sorting is down to brand approval. However, if requested by brand, aimed to use RFID or Security Tag.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Denim Expert aimed to verify this through the ZDHC Gateway. They are the first denim manufacturer in Bangladesh to become a member of ZDHC and use chemicals which are ZDHC certified. The chemicals are listed on the ZDHC Gateway.

Denim Expert did not ensure jeans used chemicals that comply with Level 1, ZDHC MRSL and did not verify this through the ZDHC Gateway as they have not produced any jeans yet. However, they are on track to meet this requirement as their production is with zero hazardous chemicals, they are ZDHC certified and all production is under Green Screen certified chemical.

b. Prohibit the following chemicals or processes:
a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting.

Denim Expert did not prohibit electroplating, potassium permanganate, stone finishing, and sand blasting as they have not produced any jeans yet. However, they reported the following progress in the development of alternatives to the above chemicals and processes:

a. Conventional electroplating: they still use all metal trims with electroplating

b. Potassium permanganate: they had forbidden potassium permanganate since 2019. They use for all their production an alternative from Officina 39. They have replaced the potassium permangante with peroxidase enzymes and ZDHC approved Level 1 alternate chemicals to fade or to give used look to the garments.

c. Stone finishing: they have not phased out stone finishing yet from their production. About 80% of their production is done without stone finishing. They use an enzyme technology to bring the stone effect. They have replaced the stones with no-stone technology washing machines which have abrasive plates fixed into the inner drum of the machine and also using synthetic stones which can withstand 2000 hours of wash cycles. The garments during wash cycles get in contact with the inner drum of the machine and also with synthetic stones and gives desired look to the garments.

d. Sand blasting: they never made any garment with sand blasting. They simulate a similar aesthetic look by deploying highly precise and modern laser machine to simulate similar kind of distress look on the Jeans.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS) certification, or OEKO-TEX.

Denim Expert did not source cellulose-based fibres from organic methods and did not verify this through third party certifications as they have not produced any jeans yet. However, they are OEKO-TEX , Global Organic Textile Standard (GOTS), and Organic Content Standard (OCS) certified.

d. Include post-consumer recycled content

Aimed to include a maximum of 20% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this through UNIFI for polyester and CERES for recycled cotton.

Denim Expert did not include post-consumer recycled content, as they have not produced any jeans yet. At this moment they are producing jeans with 20% post-consumer recycled cotton. They aim to use 30-40% recycled post-consumer cotton in the near future.

Denim Village

Headquarters
Saray/Tekirdağ, Turkey

Website
https://denimvillage.com/

Product launch
August-September 2021

Category

Organisation description

From our first day of operation 20 years ago, we focused on sustainable value creation. When we introduced and developed the 'Aqua Project' with Replay and the 'Less-Water' 'Waterless' projects were born with Levi's at Denimvillage's R&D center, laser was not popular and e-flow technologies did not exist. Denimvillage R&D center has always been home to notable designers such as Adriano Goldschmied and Francois Girbaud and some well-known brands' first ever collections e.g. Blue Star by Levi's, relaunch of GAP 1969, Puma, Acne, Ksubi jeans, Frame's and some other L.A brands' first overseas development and production operations. The #20yearschallenge brought us back to the Global Denim Event in Shanghai where we were invited to give a speech on the 'Environmental Footprint of Denim'; when we were one of the first to present organic collections to a few brands, to have sustainable product vision and be one of the very first to be listed at the Textile Organic Exchange website; decided to end sand blasting in our processes and officially notified our customers way before the global ban was put into place, while all legendary brands were still producing at factories that continued to apply it. DV's mission has always been to lead by example.

We chose not to advertise sustainability as a marketing tool but rather to lead the future of denim together with NGOs, brands and suppliers of raw material, machinery and chemicals. Today, Denimvillage by SuGlobal A.S. continues to inspire its long-term strategic partners and selected customers - premium and super-premium brands - from Europe, USA, Japan, Canada and Australia. Our vertical facility is headquartered in Turkey with a production capacity of 300-350K/month and 50K in sample services. It is home to world's best technology and high-level investment of robust 3-stage wastewater treatment center and water recycling mechanisms, tracking resource inputs that go through a powerhouse controlled by centralized fully-automated advanced control systems which ensures that the output is high-quality and traceable. We were excited to hear about The Jeans Redesign Project by Ellen Macarthur Foundation because it meant that our individual efforts for the past 20 years were finally joined with others in a collective space. We apply circular business models to our supply (aka, value) chain at design & collection, product development and production processes; rethinking the birth of a pair of jeans at every step of the way. Denimvillage chooses to partner with suppliers and brands that we see as the visionaries and show credible commitment to the circular business models. We will continue to do so in the future.

Contact

Hadi Karasu, Chairman

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Denim Village aimed to produce jeans in accordance with the Guidelines but did not produce any volume of such jeans by May 2021. The Jeans Redesign product development workshops were being held at Denim Village's R&D Center, when the global pandemic hit soon after the company joined the project. Customer retail brands could no longer visit once borders were down and international flights were cancelled. Topics they used to discuss and work out in a single physical in-person workshop were covered and explored over 15 virtual calls; delays in the supply chain, especially overseas shipments from local suppliers in raw materials, in return caused delays in review and approvals stages. As the fashion industry saw a severe drop in retail sales, it became harder for brands to sell their core products existing on the market. Brands became hesitant to put new products on the market made according to some new rules. Despite the resistance the companies faced during COVID, Denim Village succeeded in including a limited number of styles for the first round, in order not to jeopardize the project. They created a separate vertical development and production line for these products in the factory and heavily invested in sustainable laundry machinery and equipment, because their pre-COVID goal was to make half of their collection in line with The Jeans Redesign guidelines. Similarly, they consolidated their customer portfolio and included brands who share this vision and are willing to redesign their production in compliance with The Jeans Redesign guidelines. They partnered up with Re/Done for this project, an L.A-based luxury brand which started out their operations by up-cycling pre-owned vintage jeans.

During this time, they also concentrated on new circular projects as well: developed three major upcycling projects where they created their partner-brands' first upcycled collections by turning post-industrial garments into new jeans and using left-over deadstock fabrics and clippings. By designing and carrying out circular projects and bringing their customers into projects such as The Jeans Redesign and raising their awareness around sustainability, Denim Village supports its partner – retailer brands in their transition into circular business models. Their plan is to continue collaborating with sustainable brands on The Jeans Redesign as well as independent circular projects.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Denim Village's minimum test standard for jeans, which is:

- Colour fastness to crocking (MTCC 8)
- Colour fastness to rubbing (BS EN ISO 105 X12)
- Seam strength (ASTM D1683)
- Tear strength (ASTM D1424 - Modified)
- Tensile strength (ASTM D5034 - Modified)
- Strength and Growth (ASTM D3107 - Modified)
- pH (ISO 3071)

Denim Village did not test jeans for 30 home laundries and did not perform seven durability tests, as they have not produced any jeans yet. However, Denim Village is on track to meet this requirement for their planned production, verified by in-house lab and/or third party.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- or Instructions to wash with similar colours and inside out
- or instructions to use only coloured detergent
- or instructions to avoid bleach
- or instructions to wash and dry similar colours together
- or instructions to fabric composition

Aimed to verify this by visual inspections of the garments.

Denim Village did not include an easily accessible label with the information stated above, and did not verify it, as they have not produced any jeans yet.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by the material composition of fabric.

Denim Village did not ensure material composition met a 98% cellulosic minimum and did not verify this by the material composition of the fabric and/or manufacturer's declaration, as they have not produced any jeans yet. However, they are on track to meet this requirement as they calculate the cellulose-based fibre content present in the total textile composition of the jeans by measuring each item's weight (fabric, pocketing, threads, sewn-in labels etc.) separately in conjunction with its material composition (%). This can be verified by the material composition of the fabric and other textile materials, as well as through a manufacturer's declaration.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. Aimed to include easily replaceable etiquettes that are easy to remove by tearing or cutting, for example with the help of scissors.

Denim Village did not ensure that any additional materials added to the fabric were easy to disassemble, as they have not produced any jeans yet. However they are on track to meet this requirement as their buttons can be easily removed by cutting. They started using and developing removable buttons (which can be disassembled by unscrewing), and are currently negotiating with the partner-brand the possibility of using them in bulk production.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely. Committed to taking the necessary measures to reduce or entirely remove the use of metal rivets. These redesigning efforts might include but are not limited to using recyclable metals, and bar-tacking to replace metal rivets.

Denim Village did not ensure metal rivets were removed entirely, as they have not produced any jeans yet. However, Denim Village conducted a field visit to Turkey's most well-known recycling facility and inspected how garments were sorted in the pre-recycling stage. They saw how rivets were removed with the help of pliers and informed the recycler's team of how products can be made recyclable. Upon arrival, Denim Village initiated a joint R&D project with a local metal supplier to make entirely removable rivets. For this project, they removed regular rivets and replaced them with ECO Label-certified ones that are easier to remove. They developed Jeans Redesign products with these materials and they are currently negotiating the use of easier-to-remove rivets for bulk application.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Denim Village did not ensure The Jeans Redesign logo was used, as they have not produced any jeans yet. However, they are planning to use The Jeans Redesign logo on the pocketing or hangtag. This can be verified by visual inspection of the garments.

e. Use technology that enables sorting

Not applicable, use of technology that enables sorting is down to brand approval. However, throughout the production processes, they use internal sorting connected to their software system. Their own internal traceability barcode etiquettes help tracing the jeans. Sorting jeans that contain specific material composition or The Jeans Redesign Logo will thus be possible. Furthermore, Denim Village's RFID Project is run together with Istanbul Technical University, awarded by the Scientific and Technological Research Council of Turkey, TUBITAK, and was finalized successfully in a pilot. They intend to implement it at a larger scale as part of their intelligent management for tracking and inventory control. They will work towards implementing the existing mechanism (or establishing a new one) for their pilot project within the scope of this initiative.

Denim Village did not ensure technology that enables sorting was used, as they have not produced any jeans yet. However, they are using their internal traceability system to track jeans. It is readily available to their employees through user-friendly mobile app developed by their software engineers. They use RFID with some customers. During COVID, they expanded their IT department to focus on further traceability projects. Their partner-brand embraced their QR idea, so they are looking to make it happen as part of The Jeans Redesign.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Denim Village aimed to verify this through registration on ZDHC Gateway and they abide by the products listed on MRSL.

Denim Village did not ensure jeans use chemicals that comply with Level 1, ZDHC MRSL and did not verify this, as they have not produced any jeans yet. However, they are on track to meet this requirement and to verify it through their washing recipes, which are recorded in their ERP system where each recipe is attached to a P.O. The verification of the chemicals can be made through the ZDHC Gateway or EIM (Environmental Impact Measuring) software.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to comply with this by:

a. Not using electroplating.

b. Using ozone and laser to be able to fully eliminate the use of potassium permanganate.

c. Using neutral enzymes, ozone and e-flow techniques to be able to fully eliminate stone-finishing.

d. Never using sand blasting.

In addition to the above, they are using the latest sustainable wash technologies by Jeanologia (ozone, laser and e-flow) to achieve low impact by reducing the use of water and chemicals. They engage in energy and water-saving projects and have an advanced and effective waste management technology. Aimed to verify this by a software program developed by their IT and R&D teams which assess environmental and other impact regardless of the brand of the machines.

Denim Village did not prohibit the use of the chemicals and processes above, as they have not produced any jeans yet. However, they are on track to meet this requirement and to verify it by their own environmental assessment tool. We created a brand-new eco-laundry, equipped with new generation energy-saving dryers, low-liquor washing machines, ozone, laser, e-flow technologies with eco-friendly chemicals, neutral enzymes instead of pumice stone, potassium permanganate, sand blasting or conventional electroplating. The Jeans Redesign products will be processed in a separate sustainable development and production line in their sustainable laundry. Their The Jeans Redesign products will have EIM scores less than or equal to 33 with the lowest possible environmental impact. They used natural buttons made of recycled raw material (brass), covered with eco-coating/no-coating and consists of bio-based content (plastic part is replaced with corn starch-based component, an organic and biodegradable material). This can be verified by ecological product certificates provided by metal accessories suppliers.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by the relevant certifications possessed by their suppliers. Denim Village did not source cellulose-based fibres from organic methods, as they have not produced any jeans yet.

However, they are on track to meet this requirement and to verify this through relevant certifications by fabric suppliers such as Organic Content Standard (OCS) 100, fabric specification sheet. They are currently working on other projects with RCS-certified and deadstock fabrics in order to reduce the use of virgin resources and include more recycled content. They aim to bring this into life for the future production of The Jeans Redesign products.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. However, they are already using pre-consumer recycled content. Leftover fabrics or jeans and other materials (clippings, scraps etc.) that emerge during the production are sent to their strategic project partners (recycling centres) where they are turned into their raw state of fibre. Their fabric supplier then buys and uses these recycled fibres. Denim Village then buys and uses this recycled fabric in jeans. Pocketing of the jeans may consist of recycled products too. They are currently in dialogue with their customers to form greater collaboration to work towards a project that contributes to the use of post-consumer recycled content in their products.

Denim Village did not include recycled content, as they have not produced any jeans yet. However, products in line with The Jeans Redesign guidelines will be made with 1-65% of pre-consumer recycled content to meet the Guideline requirements. Normally, Denim Village pursues special recycling projects with sustainable brands, and repurpose leftover garments, pre-industrial deadstock fabric, and clippings to design out waste and recreate value.

Ereks-Blue matters

Headquarters
Istanbul, Turkey

Website
https://www.ereksgarment.com/

Product launch
N/A

Category

Organisation description

Ereks-Blue Matters is a Woven Garments producer specialized in Organic & Sustainable Production of Jeans. Our factories are located in Turkey. Our journey started in 1985 in Istanbul by producing garments for export markets. Currently we produce around 150,000 pieces/month with a staff of 550. Our company is certified by the following organizations: SMETA-SEDEX, AMFORI-BSCI, WCA, GOTS and we have been audited by Fairwear Foundation. We are qualified to realise Eco-Washes for Denim (no chlorine, no permanganate, and no stone).

Since 2019, we opened our own Development & Washing Center called Blue Matters Responsible Production Platform. In 2010, we started to produce Jeans in a sustainable way (organic & recycled contents fabrics+trims, Eco-washes). In 2020, we reviewed our Strategy & decided to GO CIRCULAR by 2030, these are the 6 pillars we have decided to work on: REDuce, REUse, RECycle, REThink, RENew, REGenerate. Based on the above you can understand that The Jeans Redesign project is completely aligned with the values of our company. In addition, we are very excited to be part of a project developed by one of the organisations at the forefront of circularity: the Ellen MacArthur Foundation.

Contact

Romain Narcy, Board Member I Partner, Innovation & Strategy, Ereks-Blue Matters

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Ereks aimed to produce jeans in accordance with the Guidelines but did not produce any volume of such jeans by May 2021. Ereks joined The Jeans Redesign project at the end of 2020, and has since then carefully worked on their The Jeans Redesign collection and analysed what must be done and what must not be done. It was an informative journey for their team and they had a chance to discover some technical and economical barriers, learning how to overcome those challenges.

Due to covid-19 lockdowns in Turkey for the last couple of months, Ereks recently finished their collection and they will start to promote it to the brands. Ereks hopes to start the production by next year.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Ereks's minimum test standard for jeans, which is:

- Appearance:CA-TM02,
- Dimensional stability ISO 6330 (as a part of CA TM 02),
- Tensile force ISO 13935-2,
- Seam force ISO 13935-2,
- Abrasion ISO 12947-2

Aimed to verify this by: an independent laboratory validated for physical tests.

Ereks did not test fabric for 30 home laundries, as they haven't produced any jeans yet. However, Ereks sources fabrics from two The Jeans Redesign participant mills who conduct such mechanical and physical tests on site. As they are finishing their collection, they did not conduct any tests on washed jeans yet.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by: Information on reducing washing frequency, instructions to wash at low temperatures (30 degrees of below), instructions to avoid tumble drying.

Ereks did not include an easily accessible label with the information stated above, as they haven't produced any jeans yet. For future production, they aim to give clear caring instructions on the inside pocket of the jeans with eco-friendly and natural print dyes.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum.

Ereks did not ensure material composition met a 98% cellulosic minimum, as they haven't produced any jeans yet. However, they are working on this with The Jeans Redesign participant fabric suppliers while preparing their collection. As both companies are participants of The Jeans Redesign project, they are well aware of the requirements and related certifications such as Global Organic Textile Standard (GOTS) and Organic Cotton Standard (OCS) will be provided.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable, did not aim to enable easy disassembly of any additional materials that are added to the fabric. However, EREKS-Blue Matters will look into this opportunity and might reach out to companies that have the right expertise for this technology, like The Fibersort Project or the partners - collectors and recyclers - that are participating in The Jeans Redesign project.

Ereks did not ensure any additional materials added to the fabric were easy to disassemble, as they haven't produced any jeans yet. However, they plan to ensure this in the future collection by sourcing easily removable buttons from YKK.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely.

Ereks did not ensure rivets were removed entirely, as they haven't produced any jeans yet. However, they are not using any metal rivets in the collection they are developing. This does not represent a problem for them since metal rivets are generally used for look, and thus there is no physical disadvantage of not using metal rivets in the collection.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Ereks did not ensure The Jeans Redesign logo was used, as they haven't produced any jeans yet. However, they are aiming to comply with this by using The Jeans Redesign logo together with their company logo in the hangtags.

e. Use technology that enables sorting

Not applicable, use of technology that enables sorting is down to brand approval. However, they are looking into implementing tracking technology.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Ereks aimed to verify this through the ZDHC Gateway.

Ereks did not ensure jeans use chemicals that comply with Level 1, ZDHC MRSL, as they haven't produced any jeans yet. However, during the washing stage of their future collection, they will make sure that only ZDHC Level 1 and above chemicals will be used and certifications will be collected from chemical suppliers. Some of the washes have already been done and this can be verified by ZDHC gateway certificates.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by declaration from manufacturer and/or process audit.

Ereks did not prohibit the use of the chemicals and processes above, as they haven't produced any jeans yet. However, they are on track to comply with this requirement and will verify this through declaration from manufacturer and/or process audit.

In addition, the supplier of removable buttons (YKK) has declared that they banned electroplating in their sustainable product line.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by chain of custody standards and/or certificates for organic cotton. Ereks aimed to provide Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS) certifications, as well as fibre analysis realised by a third party laboratory.

Ereks did not source cellulose-based fibres from organic methods, as they haven't produced any jeans yet. However, they are on track to achieve this and verified this through working with two The Jeans Redesign participant fabric mills while preparing their collection. As both fabric mills are participants of The Jeans Redesign project, they are well aware of the requirements and related certifications such as Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) have been provided.

d. Include post-consumer recycled content

Aimed to include 5-40% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by Global Recycled Standard (GRS) and/or Recycle Claim Standard (RCS) certifications for fabrics.

Ereks did not include 5-40% post-consumer recycled content (by weight), as they haven't produced any jeans yet. As this was an optional requirement, they are aiming to make their first collection with organic cotton fabrics. However, they will get their Global Recycled Standard (GRS) certificate from Control Union next month. Ereks is also a member of Amsterdam Denim Deal and they are developing themselves on the technical wash specification related to fabrics which include recycled content. They are coordinating different projects with customers on pre-consumer and post-consumer recycled cotton and it will be finalised during 2021. But, while the Amsterdam Denim Deal is only focusing on Recycled content, there are no strict regulations on material health, durability, recyclability, traceability as in The Jeans Redesign. All in all, Ereks is already working on and understanding recycled fabrics through different projects and their plan is to work on it as soon as the new The Jeans Redesign guidelines are launched.

Frontline

Headquarters
Hong Kong, Hong Kong

Website
https://frontline.com.hk/

Product launch
N/A

Category

Organisation description

This year Frontline Clothing HK is celebrating 27 years of excellence in denim development and manufacturing. Through its ongoing commitment to sustainability via direct investment in the latest machine technology and sustainable chemical research they have built a world-class organization supporting some of the world's most forward-thinking denim brands. Frontline has built a unique one-stop-shop for global creatives in the denim industry to develop sustainable product from initial concept, all the way through the production process to shipment. From our extensive on-sight "eco-fabric library" to our state of the art development centre, located within the production facility in South China and Cambodia we are a full service design to delivery organization that believes in the execution of high quality sustainable production that will ultimately help contribute to the ultimate goal of a circular economy. By partnering with the Ellen MacArthur foundation and joining The Jeans Redesign project, Frontline has further strengthened its commitment to move the industry forward through its focus on providing better and more sustainable alternatives to its talented and diverse global customer base. We believe that only through true and transparent collaboration with our clients and industry partners can one truly report positive movement forward for our planet and people.

"It seems simple: our planet has gifted us many valuable resources, it's up to us to not exploit them. I've never viewed this as a trend but a personal and corporate responsibility but like an orchestra it takes a lot of people working together to change the norm. At Frontline, the aesthetic decisions lie in the hands of our customers but we are committed to promote and support our goal of contributing to a circular economy. Working with the Ellen MacArthur Foundation on The Jeans Redesign is an opportunity to achieve that goal. We are very excited to know we are not alone"

Contact

Roel Vossen, Founder and CEO, Frontline Clothing, Ltd.

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Frontline aimed to produce jeans in accordance with the Guidelines and produced a volume of such jeans, as initially committed, by May 2021. Volumes have been submitted to the Foundation only. While Frontline has sold a volume of jeans (in accordance with the Guidelines) to a The Jeans Redesign participant brand, they have faced a challenge that prevented a higher percentage of their assortment from meeting all requirements. In particular, the factor that drove the majority of non-compliance is the "no-electroplating guideline".

This was nearly impossible to comply to as all brands/customers still nominated their own hardware and nearly all use electroplating. If electroplating was not considered, 50% of Frontline's jeans production would be compliant with the Guidelines, which was relatively easy for them to achieve. The remainder 50% would be due to the use of polyester and other non-cellulosic fibres in the fabrics. Frontline relies mostly on their brand customers to comply with 98% cellulosic composition and adhere to the other criteria. Although they push for every parameter to be compliant, over half of their customers have not joined The Jeans Redesign nor made it a priority yet.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Frontline's minimum test standard for jeans, which is:

Quality assurance Procedure – Raw Material (Fabric) test before production:

- Fabric weight evaluation. (+1-5%)
- Fabric PH value evaluation (AATCC 81)
- Dimensional change of fabric after home laundering (AATCC 135)
- Skewness change in fabric twist (AATCC 179)
- Tensile & tearing strength of Fabric (ASTM D5034 & ASTM D2261)
- Stretch & Recovery: Stretch Properties of fabric woven from stretch yarn (ASTM D3107)
- Seam Strength & Seam slippage of Woven fabric (ASTM D1683)

Durability guidelines – Garment will be verified by:

- PH value evaluation (AATCC 81)
- Dimensional change of garment after home laundry (AATCC 150) as per care label
- Colour Fastness to laundering: accelerated (AATCC 61) covering colour changing & staining
- Colour Fastness to dry & wet crocking (AATCC 8)
- Pilling after home laundering (ASTM D4970)
- Breaking strength and elongation of fabric (ASTM D 5034), Grab test.
- Tearing strength of fabric by the tongue (ASTM D2261) / Falling Pendulum (ASTM D1424)
- Stretch & Recovery: Stretch Properties of fabric woven from stretch yarn (ASTM D3107)
- Standard Test method for pocket reinforcement (ASTM D7506)
- Seam Strength & Seam slippage of Woven fabric (ASTM D1683)
- Attachment strength of trims (rivet / shank / snap), (ASTM D7142)

Frontline tested jeans for 30 home laundries and performed three durability tests (abrasion, tensile and tear strength before and after wash) to meet their minimum test standard for jeans.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Instructions to avoid dry cleaning

Aimed to verify this by: Bureau Veritas, ITS or SGS in conjunction with intensive in-house lab testing all the way through the production process. Additionally, this will be present on a care label on the garment.

Frontline included an easily accessible label with the information stated above, verified by internal quality check and third party inspections. In particular, 90% of the labels that they use advise the clients through their websites on how to care for denim, and they mention to wash every three to five wears, or to "wear often wash less". All the labels mention "hang or lay flat to dry". Only 5-10% mention "use tumble dry low". Frontline reported that this is easy to comply with.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by Bureau Veritas, ITS and SGS. Additionally, this will be visible to consumers on the care label.

Frontline ensured material composition met a 98% cellulosic minimum and verified this through each supplier mill's strict guidelines and internal testing. In particular 50% of the total Frontline production contains at least 98% cotton or cellulose.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable, did not aim to enable easy disassembly of any additional materials that are added to the fabric.

However, starting in 2020 with Unspun they have been using their removable shank button and will be selling similar to other clients this year (2021).

c. Remove rivets entirely or reduce them to a minimum

Not applicable, did not aim to remove metal rivets entirely or reduce them to a minimum.

However, they have pushed hard but only 10% of their clients were willing to remove their rivets for what they called durability reasons though they explained that a bar tack or even most normal construction is sufficient. They will continue to push.

d. Use The Jeans Redesign logo

Not applicable, use of The Jeans Redesign logo is down to brand approval.

e. Use technology that enables sorting

Not applicable, use of technology that enables sorting is down to brand approval.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Frontline aimed to verify this through the ZDHC Gateway.

Frontline ensured jeans use chemicals that comply with Level 1, ZDHC MRSL. This was verified by ZDHC gateway by the chemical vendors with whom they contract. About 25% of the jeans they produce use only ZDHC approved chemicals. The remainder still use conventional bleaching agents.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by Frontline Clothing Ltd. which uses pumice stone and PP alternatives in addition to laser, ozone. This will be additionally verified by Jeanologia EIM report.

Frontline prohibited the use of the chemicals and processes above and verified this through the ZDHC Gateway. They have been very successful in promoting the ZDHC alternatives to potassium permanganate but the sustainable alternatives to bleach are roughly 10x the cost and therefore all brands have only substituted their potassium permanganate use and not their conventional bleach. Frontline needs to see a dramatic drop in bleach alternatives and its chemical concentration integrity to be able to switch over fully. It is on their agenda for next year to push more clients to alternatives but they see little help currently from chemical suppliers.

Frontline prohibited the use of conventional electroplating for The Jeans Redesign products. However, their biggest challenge by far was eliminating electroplating from hardware trims that they use. Their branded customers nominate 100% of this component so they have no control on it at the moment. They need to see dramatic industry improvement in the development of metal hardware alternatives.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by the Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS).

Frontline sourced cellulose-based fibres from organic methods and verified this through each mill's internal test reports on fibre content. This should rise dramatically by 2021 as more mills are showing a greater offering of these types of fabrics and they are slowly becoming more affordable, though they are still somewhat cost prohibitive. They have been able to get their clients to switch their fabrics only about 10% of the time for 2020. The pandemic slowed or stopped almost all of their clients' plans to shift to greener fabrics content, for example in terms of regenerative and organic content. But they see big traction in Q1 of 2021 so they hope to get this to be at least 30% by end of year with continual growth.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. Frontline reported that almost none of their supplier mills has showed any interesting offering that would comply with this requirement.

Hirdaramani Group

Headquarters
Colombo, Sri Lanka

Website
https://www.hirdaramani.com/

Product launch
N/A

Category

Organisation description

It is with great pleasure and excitement that we at the Hirdaramani Group strengthened our sustainability agenda, by joining the Ellen MacArthur Foundation Make Fashion Circular in 2019 and its journey on The Jeans Redesign. As a large manufacturer of lifestyle casual apparel, denim manufacturing is at the core of our activities. Hirdaramani's infrastructure powers end-to-end supply chain solutions to the industry via factories in Sri Lanka, Bangladesh, Vietnam and Ethiopia. The Group is one of the largest manufacturers of jeans globally and is committed to reduce the usage of water, energy and chemicals in its manufacturing processes through product Redesign, technology and innovation.

The design team is focussed on closed loop fashion and the Group continues to invest in creating more sustainable products. The Ellen MacArthur Foundation is an esteemed global platform on which we as stakeholders of the global fashion industry can lend our expertise at a round table of brands, manufacturers and recyclers for the greater goal of a truly responsible fashion industry.

Contact

Nikhil Hirdaramani, Director, Hirdaramani Group

JEANS PRODUCED ACCORDING TO THE GUIDELINES

HIRDARAMANI aimed to produce jeans in accordance with the Guidelines and produced a volume of such jeans by May 2021. Volumes have been submitted to the Foundation only. In particular, they produced some orders for a The Jeans Redesign participant brand. Some other customers have been adopting part of The Jeans Redesign criteria, but further development into circularity adoptions were hindered due to disrupted buying caused by the pandemic. HIRDARAMANI has promoted circular product design to their customers, and are ready to supply more circular jeans.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet HIRDARAMANI's minimum test standard for jeans, which is:

- Tensile: 4.5lb
- Tearing: 60-85lb
- Abrasion: 15000 Cycle
- Seam Slippage: 35-40lb
- Stretch & Recovery (Growth): 7%
- Appearance: Satisfaction
- Color Change: 4
- Self-Staining: 4-5
- Defect: Satisfaction
- Dimensional Changes: Brand dependent

Aimed to verify this through AATCC, ASTMD, and ISO testing methodologies.

HIRDARAMANI tested jeans for 30 home laundries and performed ten durability tests (as stated above) to meet their minimum test standard for jeans, verified through AATCC, ASTMD, and ISO testing methodologies.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Wash inside out

Aimed to verify this by physical testing.

HIRDARAMANI included an easily accessible label with the information stated above, verified by physical testing. This was printed on the pocket bag, and it also included an additional instruction not to use bleach.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by a fabric composition test.

HIRDARAMANI ensured material composition met a 98% cellulosic minimum and verified this by a fabric composition test.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. The Jeans will include a form of printed ID/Info Code and it is easy to remove because it is printed on the garment.

HIRDARAMANI ensured any additional materials added to the fabric were easy to disassemble. The jeans included metal shanks that are screwed on and can be unscrewed at the disassembly stage.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

HIRDARAMANI ensured metal rivets were removed entirely by replacing them with bar tacks.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

HIRDARAMANI ensured The Jeans Redesign logo was used.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. HIRDARAMANI aimed to verify this through the ZDHC Gateway and the Oeko-Tex certification (raw material and washing plants).

HIRDARAMANI ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway. Laundry process adhered to ZDHC MRSL and Oeko-Tex standard chemicals.

b. Prohibit the following chemicals or processes:
a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by Jeanologia review of EIM scores (Environmental Impact Measurement).

HIRDARAMANI prohibited the use of the chemicals or processes above and verified this through the Environmental Impact Measurement (EIM) software, achieving "Low" scores. In particular, HIRDARAMANI prohibited the use of potassium permanganate on the designed collections and replaced it with ozone bleaching and eco-bleach. Instead of stone washing, "no stone chemicals" were used. Sand blasting was replaced by laser technology. Non-electroplated metal shanks were used.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Organic Content Standard (OCS) and Global Organic Textile Standard (GOTS) certificates.

HIRDARAMANI sourced cellulose-based fibres from organic methods and verified this through the Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS) certificates.

d. Include post-consumer recycled content

Aimed to include a minimum of 10% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this through the Recycled Claim Standard (RCS).

HIRDARAMANI included 10% post-consumer recycled content (by weight) and verified this through the Recycled Claim Standard (RCS).

Indigo Garments FZE

Headquarters
Sharjah, United Arab Emirates

Website
http://indigogarments.ae/

Product launch
N/A

Category

Organisation description

Indigo Garments FZE, or Desert Studio as it is more commonly known, is a garment laundry facility located in Dubai, U.A.E. Inspired by the surrounding desert, Desert Studio has incorporated sustainable technologies and processes from the outset – by conserving and recycling water, employing laser finishing along with nanobubble and ozone technologies. Desert Studio offers a boutique experience for its customers, a highly customized service for smaller, more specialized garment orders that require individual expertise. The Jeans Redesign objective to ensure positive impacts for the environment, society and health of those working in the industry mirror the Desert Studio ethos. Through participating in this initiative, Desert Studio hopes to further make a positive contribution and impact within the textile sector.

Contact

Mariyah Farhan, Director, Indigo Garments FZE

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Indigo Garments FZE aimed to produce jeans in accordance with the Guidelines and produced a volume of such jeans, as initially committed, by May 2021. Volumes have been submitted to the Foundation only.

To achieve this, Indigo Garments FZE has added sustainable features, both in terms of fabrics and laundry, in all its collections. This helped their customers select products that are compliant with the guidelines.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Indigo Garments FZE's minimum test standard for jeans, which is:

- Appearance: CA-TM 02
- Dimensional stability ISO 6330
- Tensile force ISO 139342
- Seam force ISO 13935-2
- Abrasion ISO 12947-2

Aimed to verify this by a third party testing lab.

Indigo Garments FZE tested jeans for 30 home laundries and performed eight durability tests to meet their minimum test standard for jeans:

- Colour Fastness to Washing ISO 105-C06
- Single tear method ISO 13937-2
- Pilling Resistance ISO 12945-1
- Fabric Weight ISO 12127-1
- PH ISO 3071
- Stretch and Recovery D3107-07
- Domestic Washing and Drying Cycle ISO 6330
- Abrasion Resistance ISO 12947-2

This was verified by tests performed at in-house lab, but did not verify it through a third party testing lab.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

Aimed to verify this by visual inspection of the garments.

Indigo Garments FZE did not include an easily accessible label with the information stated above. Since Indigo Garments FZE manufactures for Brands, they are limited to use customer nominated labeling and data. These instructions are mentioned on customer care labels which are attached to each garment. Customers did not specifically use any extra identification label to mention The Jeans Redesign guidelines.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum.

Indigo Garments FZE ensured material composition met a 98% cellulosic minimum and verified this by getting fabric reports of each order of fabric from supplier mills to certify the textile composition has the required level of cellulose based fibers.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable, did not aim to enable easy disassembly of any additional materials that are added to the fabric.

Indigo Garments FZE reported that customers have not used any such additional material.

c. Remove rivets entirely or reduce them to a minimum

Not applicable, did not aim to remove metal rivets entirely or reduce them to a minimum.

Indigo Garments FZE reported that one of their customers took the initiative to remove rivets from their products.

d. Use The Jeans Redesign logo

Not applicable, use of The Jeans Redesign logo is down to brand approval. Indigo Garments FZE reported that they can use The Jeans Redesign logo on the jeans if authorised by customers.

Indigo Garments FZE reported that none of their customers have requested to use The Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Indigo Garments FZE aimed to verify this through the ZDHC Gateway.

Indigo Garments FZE ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through their chemical supplier being registered on ZDHC Gateway.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by Jeanologia review of EIM (Environmental Impact Measurement) software scores.

Indigo Garments FZE prohibited the use of the chemicals and processes above and verified this through Jeanologia review of EIM (Environmental Impact Measurement) software scores. These processes were avoided by:

a. Conventional electroplating: Indigo Garments FZE uses customers nominated trims on all jeans. To ensure controlling, they request OEKO-TEX certificates from suppliers.

b. Potassium permanganate: Indigo Garments FZE avoids this by maximizing the use of laser and potassium permanganete replacement chemicals.

c. Stone finishing: Indigo Garments FZE does not use stone, and has already replaced it with Eflow and other enzyme bleach techniques to get the same looks.

d. Sand blasting: Indigo Garments FZE does not have a sand blasting setup.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS).

Indigo Garments FZE sourced cellulose-based fibres from organic methods and verified this through Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS). These are auditing firms who trace materials used in the complete supply chain and approve products. Indigo Garments FZE requests these certificates from an authorised control union after giving complete documentation of materials used in production.

d. Include post-consumer recycled content

Aimed to include 5% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. Aimed to verify this by Global Recycled Standard (GRS) and Recycled Claim Standard (RCS).

Indigo Garments FZE included 5-20% post-consumer recycled content (by weight) and verified this through Recycled Claim Standard (RCS) certification. Indigo Garments FZE adds a percentage of post-consumer recycled content as per the confirmation given by each customer. These percentages are ranging from 5% to 20% depending on the requirement sent by brands.

Interloop Limited

Headquarters
Khurrianwala, Faisalabad, Pakistan

Website
https://www.interloop-pk.com/

Product launch
N/A

Category

Organisation description

In pursuit of its vision "To be an agent of positive change for the stakeholders and community by pursuing an ethical and sustainable business", Interloop decided to enhance its product range and enter into the apparel segment with environmental consciousness at its core. We envisioned a facility which minimises its environmental impact, prioritises worker well-being and maintains a high standard of operational efficiency. It is within this context that Interloop Denim was conceived to disrupt the denim industry with ambitious sustainability targets focused on ethical sourcing, water and energy efficiency, reduced carbon emissions, and recycled waste.

At Interloop we continuously explore ways to refine our manufacturing based on the concept of circularity and only take what we need, using it as efficiently as possible. The Jeans Redesign has set a new standard for all industry peers who wish to be part of this shift towards a more holistic and environmentally conscious manufacturing approach. We are excited to be part of this collaborative platform and eager to push forward its innovation to create better, more sustainable jeans that are both authentic and accessible.

Contact

Feroze Ahmed, VP Denim, Interloop Limited

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Interloop Limited aimed to produce jeans in accordance with the Guidelines and produced a volume of such jeans, as initially committed, by May 2021. Volumes have been submitted to the Foundation only. This was due to joining the project in February 2021, and their initial volume commitment was based on a February 2022 time frame. However, they have managed to produce and sell a quantity of jeans before May 2021. More recently, Interloop Limited's samples of The Jeans Redesign products were submitted to different customers, who have selected a few articles. Interloop Limited is in touch with these customers and right now a price negotiation is in process.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Interloop Limited's minimum test standard for jeans, which is:

- Color Fastness to Washing (ISO 105-C06)
- Color Fastness to Water ISO 105 E01
- Color Fastness to Perspiration ISO 105E04
- Color Fastness to Rubbing ISO 105 X12
- Pilling Resistance ISO 12945-2
- Fabric Weight ISO 12127-2
- pH ISO 3071
- Domestic Washing & Drying ISO 6330
- Abrasion Resistance ISO 12947-2
- Tear Strength ISO 13937-1
- Tensile Strength ISO 13934-1
- Seam Slippage ISO 13936-1
- Seam Strength ISO 13935-2

Aimed to verify this by Internal Accredited LAB, In house Europeans Slandered Internal Accredited LAB and third party lab testing.

Interloop Limited tested jeans for 30 home laundries and performed 13 durability tests to meet their minimum test standard for jeans. Testing methods and reports (both internal and external) have been carried out for verification.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Instructions to line dry
- Instructions to warm iron
- Request to donate for good will

Aimed to verify this by visual inspections of the garment.

Interloop Limited included an easily accessible label with the information stated above, verified by visual inspections of the garment. All details are mentioned on the care tag, that can be easily found on the inner side of the garment.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by an internal accredited lab.

Interloop Limited ensured material composition met a 98% cellulosic minimum and verified this by an internal accredited lab as well as from an external third party lab. In addition, they verified this through Content Claim Standard (CCS) Certificate, Global Organic Textile Standard (GOTS) Certificate, and Global Recycle Standard (GRS) Certificate.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

Interloop Limited ensured any additional materials added to the fabric were easy to disassemble. Interloop Limited confirmed that YKK Natulon Environmentally zipper has been used and it is easy to remove by cutting out. Interloop Limited confirmed that the care label is easily removable without damaging the garment. Interloop limited confirmed that wooden buttons are easy to remove by cutting the thread used to attach the button on the garment. There was no additional component to the ones mentioned above.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Interloop Limited ensured metal rivets were removed entirely. This was achieved by using bar-tacks instead of rivets.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Interloop Limited did not ensure The Jeans Redesign logo was used on garments. However, they are using it on their official site, for the collection made according to The Jeans Redesign guidelines.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Interloop Limited aimed to verify this through the ZDHC Gateway.

Interloop Limited ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by the use of the ZDHC Gateway, Jeanologia EIM system, wash recipe, and through:

- Certificate from Zippers and thread suppliers, no use of electroplating process
- Use of laser instead of sand blasting, stone washing, and potassium permanganate.

Interloop Limited prohibited the use of the chemicals and processes above and verified this through the ZDHC Gateway, Jeanologia EIM system, and wash recipe.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) Transaction certificate for organic cotton products.

Interloop Limited sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) Transaction certificate for organic cotton products.

d. Include post-consumer recycled content

Aimed to include 20% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. Aimed to verify this by fabric certificates, an internal accredited lab, and third party composition tests.

Interloop Limited included 20% post-consumer recycled content (by weight) and verified this through fabric certificates, an internal accredited lab, and third party composition tests.

Mastertex

Headquarters
Hong Kong, Hong Kong

Website
http://www.mastertex-hk.com/

Product launch
N/A

Category

Organisation description

In 1998 we embarked on a journey to build a world class manufacturing company with an underlying and simple philosophy of doing it just that bit different to the rest of our industry. From the very start we knew it was the love of what we do and the way we conduct business that would give us that difference we strive for. We believe in building long term equitable relationships that work for both parties to achieve the best results for all. Our people and our partners are important to us and we care about them passionately, as we know without them we wouldn't be the type of business we strive to be. Today, from our operations across south East Asia and Northern Africa we produce in excess of two million garments a month and we are in the fortunate position to work with some of the best fashion brands in the world. The Jeans Redesign is helping us to work towards the global carbon footprint reduction, and sustainable product saving our Mother Earth.

Contact

Eric Faranghi, Global Marketing Director, Mastertex International Limited

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Mastertex aimed to produce jeans in accordance with the Guidelines and produced a volume of such jeans, as initially committed, by May 2021. Volumes have been submitted to the Foundation only. Mastertex achieved this by selecting the correct denim parameters after multiple R&D tests and using environment friendly chemicals as well as running in very soft wash condition, no temperature and no aggressive auxiliary chemicals were used to make sure to accomplish guideline requirements.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 100 home laundries and retain their ability to meet Mastertex's minimum test standard for jeans. Aimed to verify this by a third party.

Mastertex tested jeans for 30 home laundries and performed durability tests to meet their minimum test standard for jeans, verified by a third party verification company Intertek. Mastertex reported it is possible to go up to 30 home laundries and keep maximum garments parameter up to acceptable test requirement, because they are avoiding any aggressive conditions while doing denim processing.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by a third party (GOTS-Ceres; OCS and RCS-control union).

Mastertex included an easily accessible label with the information stated above, verified by a third party (GOTS-Ceres; OCS and RCS-control union).

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by a third party verification. In particular, aimed to produce Vintage Straight Leg style with 99% Organic Cotton - 1% Spandex composition; and Low rise skinny style with 98% Cotton - 2% Spandex composition.

Mastertex ensured material composition met a 98% cellulosic minimum and verified this by fabric mills and they can verify it by a third party verification. In particular, produced multiple styles with a cellulosic content of 98% and 99%.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

Mastertex ensured any additional materials added to the fabric were easy to disassemble. In particular, they included zipper, button, and label and reported that these are easy to disassemble by using knife, scissors, or thread cutter, ensuring safety.

c. Remove rivets entirely or reduce them to a minimum

Not applicable, did not aim to remove metal rivets entirely or reduce them to a minimum.

Mastertex ensured metal rivets were reduced to a minimum. Upon request, they can be eliminated.

d. Use The Jeans Redesign logo

Not applicable, use of The Jeans Redesign logo is down to brand approval.

e. Use technology that enables sorting

Not applicable, use of technology that enables sorting is down to brand approval.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Mastertex aimed to verify this through the ZDHC Gateway.

Mastertex ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

b. Prohibit the following chemicals or processes:
a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by Jeanologia and Tonello, Ozone, Laser, Enzyme, Bleach, Neutral towel, Neutral, Cleaning, Softening-re-laser. Aimed to verify this by a third party.

Mastertex prohibited the use of the chemicals and processes above and verified this through Jeanologia and Tonello, Ozone, Laser, Enzyme, Bleach, Neutral towel, Neutral, Cleaning, Softening-re-laser. Mastertex has not been using electroplating and sand blasting in denim process for a long time. They replaced potassium permanganate by doing laser printing and can match up to 70% look. For Bleach, it can be replaced by non-chlorine eco-bleach but the cost will be three times higher than conventional bleach. Stones can be replaced by organic non-dust stone, although the cost is much higher.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Global Organic Textile Standard (GOTS) (via third party Ceres) and Organic Content Standard (OCS) (via third party Control Union).

Mastertex sourced cellulose-based fibres from organic methods and verified this through third parties: Global Organic Textile Standard (GOTS) (via third party Ceres) and Organic Content Standard (OCS) (via third party Control Union). The fabric mill can provide traceability information for cotton sources and verify it by a third party.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

Pacific Jeans

Headquarters
Chattogram, Bangladesh

Website
https://www.pacificjeans.com/

Product launch
N/A

Category

Organisation description

Pacific Jeans, pioneered the denim production in Bangladesh way back in 1984. Since its inception Pacific Jeans continues the journey of sustainability adopting ground breaking technologies. It is one of the largest premium jeans and casual wear manufacturers in Asia, producing over 36 million jeans every year and employing over 28,000 skilled workers. We are incredibly proud to be the first Denim factory in the world to produce gold level Cradle to Cradle Certified (C2C) jeans. To validate its corporate environmental commitment Pacific Jeans Group adopted ZDHC guideline and MRSL to all its manufacturing units. With a number of sustainability certifications like LEED, HIGG FEM, GOTS, OCS, GRS, RCS, BCI. Even more to this commitment, our design team is always focusing on the use of natural resources efficiently and specializes in sustainable washing solutions. Pacific Jeans actions and values reflect back to the ethos of The Jeans Redesign and we're very proud to be a Participant of The Jeans Redesign initiative of Ellen MacArthur Foundation.

Contact

Syed M. Tanvir, Managing Director, Pacific Jeans

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Pacific Jeans produced the total volume of jeans (in accordance with the Guidelines) initially committed to by May 2021. Volumes have been submitted to the Foundation only. Pacific Jeans reported that they are working with a The Jeans Redesign participant brand and supplying Cradle to Cradle (C2C) Gold Certified® jeans to them.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Pacific Jeans' minimum test standard for jeans, which is:

- Appearance: CA-TM 02
- Dimensional stability ISO 6330 (as part of CA TM-02)
- Tensile Force ISO 139342
- Seam force ISO 13935-2
- Abrasion ISO 12947-2

Did not aim to verify this by a third party verification.

Pacific Jeans tested jeans for 30 home laundries and performed five durability tests (appearance, dimensional stability, tensile force, seam force, abrasion) to meet their minimum test standard for jeans. They verified this through documentation provided by their customer confirming that garments meet the above standard.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying.

Aimed to verify this by adding this information as part of the product's care instruction.

Pacific Jeans included an easily accessible label with the information stated above as part of the product's care instruction.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by third party inspection to confirm garment content.

Pacific Jeans ensured material composition met a 98% cellulosic minimum and verified this by third party inspection to confirm garment content. They did not report any challenge faced in meeting this requirement.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. Aimed to include metal trims and the confirmed they are easy to remove by cutting out.

Pacific Jeans ensured any additional materials added to the fabric were easy to disassemble by cutting out. In particular, they are only using a metal button and a metal zipper which are easy to remove by cutting out.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Pacific Jeans ensured metal rivets were removed. They are not using any metal rivets to be able to qualify The Jeans Redesign products as C2C certified.

d. Use The Jeans Redesign logo

Not applicable, use of The Jeans Redesign logo is down to brand approval.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Pacific Jeans aimed to verify this through the ZDHC Gateway.

Pacific Jeans exceeded this requirement and ensured jeans use chemicals that comply with Level 1, ZDHC MRSL, as well as with the Material Health Assessment as part of C2C's certification process. They are conducting wastewater tests twice a year as per ZDHC guideline and published the report in ZDHC gateway & IPE platform. As per latest test report, all parameters meet the ZDHC standard. As per the C2C certification process, MBDC (certification body) conducted Material Health Assessment and provided a master list of approved chemicals, all of which are complying with ZDHC Level 1 or above. Pacific Jeans is only using these C2C approved chemicals during production of C2C certified products.

b. Prohibit the following chemicals or processes:
a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by review of EIM (Environmental Impact Measurement) software scores.

Pacific Jeans prohibited the use of the chemicals and processes above and verified this through review of EIM (Environmental Impact Measurement) software scores. As per C2C certification process, they have completed a Material Health Assessment for fabrics, trims, and chemicals through MBDC, a C2C approved Material Health Assessment body. After completing the test, they have received an approved Bill of Materials (BOM) from certification body. They are producing C2C certified products by using only C2C approved chemicals and trims from the approved Bill of Materials (BOM). They are also reviewing the EIM (Environmental Impact Measurement) software score internally.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS) Certification.

Pacific Jeans sourced cellulose-based fibres from organic methods and verified this through the Organic Content Standard (OCS) Certification. Their factory is certified with both Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) but as per customer requirement they are using OCS certificate for all C2C products.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.

Pacific Jeans have not used post-consumer recycled content in their Jeans Redesign products so far, however for other customers they are using post-consumer recycled content.

Remi Holdings

Headquarters
Dhaka, Bangladesh

Website
http://www.bitopibd.com/

Product launch
N/A

Category

Organisation description

Remi Holdings Ltd, a concern of Silk Route Sourcing Ltd, one of the state-of-the-art facilities in Bangladesh. Established in 2015, it has been a market leader in manufacturing and exporting woven products - denim and non-denim lifestyle, for mens, ladies & kids. Remi is the world's highest rated LEED Platinum factory, with zero waste emissions meaning all solid wastes are converted to energy. With a 2,600 strong professional workforce, the most advanced manufacturing systems, modern machinery and washing plant (with both dry & wet processing facilities), Remi produces more than 600,000 pieces of quality product every month. The Jeans Redesign encourages us to think about how we produce, use and maintain denim.

The guidelines provide a clear step by step process on how to produce circular jeans, and how to incorporate circularity into our business model. The project is far reaching, and appealing to denim lovers across the globe. The Jeans Redesign provides us with an opportunity to learn about initiatives and ideas from organisations worldwide, and exchange knowledge to create a stronger community to voice the need for such work on an even bigger scale. Above all, we want to create a better environment, with minimal waste & pollution locally, and globally for the sake of our future generations.

Contact

Miran Ali, Managing Director, Remi Holdings

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Remi Holdings Ltd aimed to produce jeans in accordance with the Guidelines but did not produce any volume of such jeans by May 2021. As Remi Holdings is an export-oriented factory, they produce all products only when customers confirm their orders. Due to COVID, all orders from their customers were delayed.

At the time of writing, only one customer from their portfolio approached them for producing a style according to The Jeans Redesign guidelines, which is currently under development. On the other hand, they have been ready to produce jeans in accordance with the Guidelines for many months.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Remi Holding's minimum test standard for jeans, which is:

- Appearance CA-TM 02 OR GAAW x 30
- Dimensional stability ISO 6330
- Tensile force ISO 139342
- Seam force ISO 13935-2
- Physical testing and visual inspection of garments
- Tear strength ISO 13937-2
- Colour fastness to rubbing ISO 105-X12
- Colour fastness to perspiration ISO 105-E04 or GB/T 3922
- Colour fastness to water ISO 105-E01
- Stretch and Recovery ASTM D 3107
- pH ISO 3071
- Colour fastness to artificial light ISO 105-B02

Did not aim to verify this by third party verification.

Remi Holdings did not test jeans for 30 home laundries and did not perform 13 durability tests to meet their minimum test standard for jeans, as they have not produced any jeans yet. However, they verified this through their own laboratory and, upon request, they can verify this from third party testing companies as well (such as Intertek or SGS).

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by SGS or Intertek.

Remi Holdings did not include an easily accessible label with the information stated above because, as this is purely a product-dependent decision and the product is selected by their customers.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify the weight of all components of denim garment by accredited QA third party test labs.

Remi Holdings did not ensure material composition met a 98% cellulosic minimum and did not verify this by QA third party test labs, as they have not produced any jeans yet.

c. Remove rivets entirely or reduce them to a minimum

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

Remi Holdings did not ensure any additional materials added to the fabric were easy to disassemble, as they have not produced any jeans yet. However, they are already producing jeans that include metal trims, RFID and Remi Holdings confirms they are easy to remove by cutting out.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo by printing it onto the care label or an additional woven label stitched into the garment.

Remi Holdings did not ensure The Jeans Redesign logo was used, as the use of The Jeans Redesign logo is down to brand approval.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Remi Holdings aimed to verify this through the ZDHC Gateway.

Remi Holdings did not ensure jeans use chemicals that comply with Level 1, ZDHC MRSL and did not verify this through the ZDHC Gateway, as they have not produced any jeans yet. However, they are on track to meet this requirement, and to verify this through their Gateway ID: A369EQ24.

b. Prohibit the following chemicals or processes:
a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by product guidelines in code of conduct, assessment of processes and provided MSDS of production partners, independent lab analytics, and certificates such an OEKO-TEX 100.

Remi Holdings did not prohibit the use of the chemicals and processes above and did not verify this, as they have not produced any jeans yet. However, they are on track to meet this requirement and to verify it by product guidelines in code of conduct, assessment of processes and provided MSDS of production partners, independent lab analytics, and certificates such an OEKO-TEX 100. This can also be verified by individual customers audit teams as well as by a third party audit. In place of these processes they use laser machines, special enzymes, and reusable artificial stones.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS) Certification.

Remi Holdings did not source cellulose-based fibres from organic methods and did not verify this through Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS) Certification, as they have not produced any jeans yet. However, they are on track to meet this requirement and to verify it through these certifications.

d. Include post-consumer recycled content

Aimed to include 5% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by use of certified recycled fibres to the Global Recycled Standard (GRS) or Recycled Claim Standard (RCS).

Remi Holdings did not include 5% post-consumer recycled content (by weight) and did not verify this through the Global Recycled Standard (GRS) or Recycled Claim Standard (RCS), as they have not produced any jeans yet. However, they are on track to meet this requirement and to verify it through these certifications.

SAITEX

Headquarters
Dong Nai, Vietnam

Website
https://www.sai-tex.com/

Product launch
N/A

Category

Organisation description

SAITEX is the world's first and only denim factory that is B-Corp Certified, bluesign approved, Fair Trade, and LEED-certified. Under the leadership of Sanjeev Bahl, SAITEX has become a facility with unrivalled technology and sustainability impact in the fashion apparel manufacturing industry. Their current facilities are based in Ho Chi Minh City, with denim washing, sewing and finishing all on-site. The facility produces an average of 18,000 pairs of jeans per day and with a $2M water recycling system on-site. SAITEX challenges the assumption that denim factories can't be responsible for planet and people. Their global facilities serve as a destination for anyone looking to create and support responsibly made apparel. In launching its The Jeans Redesign, the company leverages a dynamic opportunity that will create a circular business through the design, manufacturing, sale and up-cycling of denim garments. The design and content of the jeans will remain in the hands of the designing brands, but SAITEX will arrive to them with a commitment to:

- Not use any hazardous chemicals
- Recycle 100% of the water used in the process that is not evaporated
- Remove all PP and sand blasting from the process
- Recycle all bi-products from the production process
- Encourage brands to design garments that will include fibres from regenerative agriculture and recycling
- Encourage brands to design garments that will include recycled parts
- Provide innovative traceability solutions through Fibretrace

"Through our continuous research and investment into responsible circular manufacturing practices, SAITEX's aim is to encourage the rest of the industry to follow our lead," explains CEO Sanjeev Bahl. "By launching our The Jeans Redesign we will extend an existing collaboration with the brands that produce sustainable products within our facilities. This programme will extend the circularity of manufacturing instantly proving that the loop can be closed on the lifecycle of any jean. Our hope is to support a fundamental shift in thinking towards a circular economy model starting with the fashion industry."

Contact

Sanjeev Bahl, CEO, SAITEX

JEANS PRODUCED ACCORDING TO THE GUIDELINES

SAITEX aimed to produce jeans in accordance with the Guidelines and produced a volume of such jeans, as initially committed, by May 2021. Volumes have been submitted to the Foundation only.

Although SAITEX strongly believes in the principles of the circular economy and will keep promoting their shared vision on this, it is ultimately the brands who will make the final decision on whether to produce in accordance with The Jeans Redesign guidelines. Hence, volume predictions or commitments will need to come from them.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet their minimum test standard for jeans, which is:

- Dimensional changes of garments after home laundering (AATCC 150)
- Pilling after home laundering (ASTM D4970)
- Determining steam twist in garments
- Breaking strength of textile fabrics: grab test (ASTM D5034)
- Tearing strength: Elmendorf apparatus (ASTM D1424-09)
- Failure in sewn seams: woven fabrics (ASTM D1683-17)
- Attachment strength of trims (16 CFR 1500.53)
- Pocket strength (TPDD-00004)
- Colour fastness to actual laundering (AATCC 124)

Aimed to verify this by a third party testing lab Bureau Veritas.

SAITEX tested jeans for 30 home laundries and performed nine durability tests to meet their minimum test standard for jeans, verified by a third party testing lab Bureau Veritas. Proper research was done into materials and careful wash selection to maintain fabric strength and durability without compromising on the outlook.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees of below)
- Instructions to avoid tumble drying

Aimed to verify this by a third party testing lab Bureau Veritas.

SAITEX included an easily accessible label with the information stated above, verified by Bureau Veritas. Instead of an additional label, the brand opted for printing the care instructions. This was placed either on the pocket bag or on the back yoke.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by Bureau Veritas.

SAITEX ensured material composition met a 98% cellulosic minimum and verified this by Bureau Veritas. Currently, there are a lot of options in the market for fabrics with cellulose-based fibres hence not much complexity in sourcing for both manufacturers and brands.

b. Enable easy disassembly of any additional components added to the fabric

Did not aim to enable easy disassembly of any additional materials that is added to the fabric.

SAITEX ensured any additional materials added to the fabric were easy to disassemble, for example special removable buttons have been added to the waistband, fly and placket area. This required close collaboration between the brand and the material supplier to develop the removable buttons which were used on this program. It took several trials but at the end they reached their goal and gained valuable experience which they can now share with other brands.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

SAITEX ensured metal rivets were removed entirely. Instead, bar tacks were placed for additional strength on pressure points.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

SAITEX ensured The Jeans Redesign logo was used.

e. Use technology that enables sorting

Aimed to use technology that enables sorting. Fibretrace is a technology which uses pigments and minerals that are embedded in the fibre to bring traceability from seed to shelf. These are identified by a scanner that will be connected via Bluetooth to mobile devices where all the information about the garment can be found: composition, care information, countries that is has gone through, chemicals it contains, environmental impact, certifications of manufacturers etc.

SAITEX did not use technology that enables sorting. This technology was not used on this specific program. However, with the addition of their own mill this year, they intend to offer a wide selection of fabrics which include Fibretrace technology. This will further their goal of providing more transparency into the supply chain for both brands and end consumer.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. SAITEX aimed to verify this through the ZDHC Gateway.

SAITEX ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway. SAITEX exceeded this requirement as they are a Bluesign Certified laundry. As they continuously invest in new technology and less harmful chemicals, it is standard practice for them to comply with Level 1, ZDHC MRSL.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by SAITEX using alternative methods such as laser.

SAITEX prohibited the use of the chemicals and processes above. In particular, manual hand brushing and/or laser has been used instead of sand blasting. Laser was used instead of potassium permanganate. Synthetic reusable stones were used instead of normal stones. Regarding electroplating, as SAITEX is not a trim producer, the communication about the non-use of electroplating was left to the brand and their nominated trim supplier. The supplier confirmed this has been followed.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this through the Global Organic Textile Standard (GOTS) certification.

SAITEX sourced cellulose-based fibres from organic methods and verified this through the Organic Content Standard (OCS) certification.

d. Include post-consumer recycled content

Aimed to include post-consumer recycled content. Aimed to verify this through the Global Recycled Standard (GRS).

SAITEX included 6% post-consumer recycled content and verified this through the Recycled Claim Standard (RCS).

Soorty

Headquarters
Karachi, Sindh, Pakistan

Website
http://www.soorty.com/

Product launch
N/A

Category

Organisation description

Soorty is the vertical denim and jeans manufacturer with Platinum Leed Certificated denim mill and its recently launched garment operation; "DenimKind" based in Pakistan. Soorty also has its Gold Leed Certified garment operation in Bangladesh and represents sustainability in the denim and jeans industry at scale with 6.5 million meters and 4 million units in production. DenimKind is disrupting the way Soorty looks at manufacturing with 1 million units per month with a focus on innovative sustainable operations powered by renewable energy source, updated technology and in guidance of the SDGs. Soorty embraces circular design for responsible manufacturing and has integrated a Minus Zero perspective in redesigning its business offer with a strong focus on in-house recycling yarn production, use of sustainable raw materials, water consumption conscious processes as well as the first in the industry with vertical Cradle to Cradle Certified® Gold products with Material health score at Platinum. Cradle to Cradle® is Soorty's advanced design system for developing sustainable products based on circular design and is offered to the entire value chain that ensures traceable, responsible production from fabric to finished garments.

The Soorty Cradle to Cradle Certified® Gold Level presents Pure-D fabrics and Smart Loop garments. Smart Loop; fashioned in DenimKind is the highest form of technology that aims to have a conscious mindset for collaborating with the design to produce the most responsible jeans – closing the loop and enhancing circularity. By onboarding The Jeans Redesign, Soorty presents its commitment to continue to seek creative and collaborative solutions to help advance the industry as well as to cater to the needs of the future generations. Soorty believes in the power of innovations and is constantly exploring collaborative, creative solutions. Soorty's Future Possibilities is an off and online collaboration platform to engage with global stakeholders in the fashion industry to lead, ignite, innovate, inspire beauty and innovation through ideas, interactive experiences, and collaborative growth. At Soorty we define ourselves as engineers at heart with the need to be regenerative by design. Soorty has global exposure with an R&D centre in Corlu, Turkey, a creative design office in Amsterdam, and sales offices in the US and Turkey.

Contact

Muhammad Mansoor Bilal, VP Marketing, Research & Innovation

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Soorty aimed to produce denim fabric and jeans in accordance with the Guidelines but did not produce any volume of such fabric or jeans by May 2021. This was due to the lack of orders for The Jeans Redesign products by customers.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric and jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Soorty Enterprises' minimum test standard for denim, which is:

- Colour Fastness to Washing ISO 105-C06
- Colour Fastness to Water ISO 105-E01
- Colour Fastness to Perspiration ISO 105-E04
- Colour Fastness to Rubbing ISO 105-X12
- Colour Fastness to Ozone ISO 105-G03
- Colour Fastness to Light ISO 105-B02
- Tear Force ISO 13937-1/ASTM D 2261
- Tear Force(Tongue) ISO 13937-2
- Tensile Strength (Grab) ISO 13934-2 (Grab)/ ASTM D 5034 (GRAB)
- Seam Slippage ISO 13936-1
- Seam Strength 13935-2
- Pilling Resistance IDO 12945-2
- Fabric Weight ISO 12127-1
- Elastic Behaviour ISO 14704-1 Method A
- pH ISO 3071
- Stretch and Recovery ASTM D 3107
- Domestic Washing and Drying Cycle ISO 6330
- Abrasion Resistance ISO 12947-2

Soorty Enterprises aimed for its fabric to test at a minimum of 65% of its original strength after 30 home laundries.

Did not aim to verify this by a third party verification.

Soorty Enterprises did not test fabric for 30 home laundries and they did not perform 18 durability tests to meet their minimum test standard for fabric, as they have not produced any jeans yet. However, they have done the preliminary work to ensure that this requirement can be met for future orders, and will verify this by a third party verification.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduce washing frequency
- Cold wash – wash at 30 degrees or less
- Avoid tumble-drying.
- Wash inside out

Aimed to verify this by a third party physical testing.

Soorty Enterprises did not include an easily accessible label with the information stated above, as they have not produced any jeans yet. However, they will tell future buyers to add this info on a hang tag or inside care label. They will prepare a care label in which they will clearly mention the above points, and the care label will be attached to the garment.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this through the Cradle to Cradle Certified® (C2C Certified®) Product Standard at Gold level.

Soorty Enterprises did not meet 98% cellulosic minimum material composition, as they have not produced any jeans yet. However, they already hold the C2C Certified® Product Standard at Gold level, which shows they are on track to meet this requirement on future orders.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable, did not aim to enable easy disassembly of any additional materials that is added to the fabric.

c. Remove rivets entirely or reduce them to a minimum

Not applicable, did not aim to remove metal rivets entirely or reduce them to a minimum.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo.

Soorty Enterprises did not ensure The Jeans Redesign logo was used, as they have not produced any jeans yet. However, they can offer the logo application to customers upon agreement. To offer this in the future, Soorty Enterprises has plans to offer laser stamping on garments inside the waistband.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric and jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

Soorty Enterprises did not ensure denim fabric used chemicals that comply with Level 1, ZDHC MRSL and did not verify this, as they have not produced any jeans yet. However, they are on track to exceed this requirement by being certified with C2C Certified® Product Standard at Gold Level. They only use ZDHC, Global Organic Textile Standard (GOTS), or C2C Certified® approved chemicals in their production.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by reporting wastewater data through the ZDHC Gateway.

Soorty Enterprises did not implement ZDHC Wastewater Guidelines and did not verify this through the ZDHC Gateway, as they have not produced any jeans yet. However, Soorty Denim is on track to achieve this for future The Jeans Redesign production as it is treating 100% of its industrial wastewater through WWTP according to ZDHC wastewater guidelines before discharging to the environment. Test reports of wastewater are uploaded over ZDHC gateway portal, published and verified by ZDHC.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above).

Soorty Enterprises did not ensure the wastewater volume created was a maximum of 0.025m3/yard and did not treat it to specifications a2 (above), as they have not produced any jeans yet. However, they are on track to achieve this for future The Jeans Redesign production as their volume of wastewater is under 0.02 m3/yard. For The Jeans Redesign fabric they will apply zero wastewater dyeing and finishing routes to make sure they consume as little water as possible.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by C2C Certified® Product Standard at Gold Level, Jeanologia EIM scores (Environmental Impact Measurement), and from manufacturer's process audit.

Soorty Enterprises did not prohibit the chemicals and processes above, as they have not produced any jeans yet. However, they are on track to achieve this for future The Jeans Redesign production as they are certified under C2C Certified® Product Standard at Gold Level.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS).

Soorty Enterprises did not source cellulose-based fibers from organic methods and did not verify this, as they have not produced any jeans yet. However, they are on track to achieve this for future The Jeans Redesign production as they are certified under the Organic Content Standard (OCS) and the Global Organic Textile Standard (GOTS).

d. Include post-consumer recycled content

Aimed to include 5-20% post-consumer recycled content on average (by weight) of the total fabric composition and to verify this by Global Recycled Standard (GRS) or Recycled Claim Standard (RCS) Certifications.

Soorty Enterprises did not include 5-20% post-consumer recycled content, as they have not produced any jeans yet. However, they are on track to achieve this for future The Jeans Redesign production as they are certified under Global Recycled Standard (GRS) or Recycled Claim Standard (RCS) Certifications.

Tarasima

Headquarters
Dhaka, Bangladesh

Website
http://www.bitopibd.com/

Product launch
N/A

Category

Organisation description

Tarasima Ltd, a concern of Silk Route Sourcing Ltd, one of the state-of-the-art facilities in Bangladesh. Established in 2005, it has been a market leader in manufacturing and exporting woven products - denim/non-denim lifestyle, for mens, ladies, and kids. Tarasima has a LEED Platinum certification and is the highest rated green factory as far as existing structures are concerned. The most recent addition to this facility is a 2.6 Mega Watt grid tied solar system. With a 7,000 strong professional workforce, a set of modern machineries and a modern washing plant with both dry and wet processing facilities, Tarasima produces more than 1.5 million pieces of quality product per month.

The Jeans Redesign encourages us to think about how we produce, use and maintain denim. The guidelines provide a clear step by step process on how to produce circular jeans, and how to incorporate circularity into our business model. The project is far reaching, and appealing to denim lovers across the globe. The Jeans Redesign provides us with an opportunity to learn about initiatives and ideas from organisations worldwide, and exchange knowledge to create a stronger community to voice the need for such work on an even bigger scale. Above all, we want to create a better environment, with minimal waste and pollution locally, and globally for the sake of our future generations.

Contact

Miran Ali, Managing Director, Tarasima

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Tarasima Apparels Limited aimed to produce jeans in accordance with the Guidelines but did not produce any volume of such jeans by May 2021. As Tarasima Apparels Limited is an export-oriented factory, they produce all products only when customers confirm their orders.

Due to COVID, all orders from their customers were delayed. At the time of writing, only one customer from their portfolio approached them for producing a style according to The Jeans Redesign guidelines. But they have been ready to produce them for many months.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Tarasima Apparels Limited's minimum test standard for jeans, which is:

- Appearance CA-TM 02 OR GAAW x 30
- Dimensional stability ISO 6330
- Tensile force ISO 139342
- Seam force ISO 13935-2
- Physical testing and visual inspection of garments
- Tear strength ISO 13937-2
- Colour fastness to rubbing ISO 105-X12
- Colour fastness to perspiration ISO 105-E04 or GB/T 3922
- Colour fastness to water ISO 105-E01
- Stretch and Recovery ASTM D 3107
- pH ISO 3071
- Colour fastness to artificial light ISO 105-B02

Did not aim to verify this by a third party verification.

Tarasima Apparels Limited did not test jeans for 30 home laundries and did not perform 13 durability tests to meet their minimum test standard for jeans, as they have not produced any jeans yet. However, they verified this through their own laboratory and, upon request, they can verify this from third party testing companies as well (such as Intertek or SGS).

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying.

Aimed to verify this by SGS or Intertek.

Tarasima Apparels Limited did not include an easily accessible label with the information stated above because this is purely a product-dependent decision and the product is selected by their customers.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify the weight of all components of denim garment by accredited QA third party test labs.

Tarasima Apparels Limited did not ensure material composition met a 98% cellulosic minimum and did not verify this by QA third party test labs, as they have not produced any jeans yet.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric.

Tarasima Apparels Limited did not ensure any additional materials added to the fabric were easy to disassemble, as they have not produced any jeans yet. However, they are already producing jeans that include metal trims, RFID and Tarasima Apparels Limited confirms they are easy to remove by cutting out.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Tarasima Apparels Limited did not ensure metal rivets were reduced to a minimum, as they have not produced any jeans yet.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo by printing it onto the care label or an additional woven label stitched into the garment.

Tarasima Apparels Limited did not ensure The Jeans Redesign logo was used, as the use of The Jeans Redesign logo is down to brand approval.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Tarasima Apparels Limited aimed to verify this through the ZDHC Gateway.

Tarasima Apparels Limited did not ensure jeans use chemicals that comply with Level 1, ZDHC MRSL and did not verify this through the ZDHC Gateway, as they have not produced any jeans yet. However, they are on track to meet this requirement, and to verify this through their Gateway ID: A369EQ24.

b. Prohibit the following chemicals or processes:
a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by product guidelines in code of conduct, assessment of processes and provided MSDS of production partners, independent lab analytics, and certificates such an OEKO-TEX 100.

Tarasima Apparels Limited did not prohibit the use of the chemicals and processes above and did not verify this, as they have not produced any jeans yet. However, they are on track to meet this requirement and to verify it by product guidelines in code of conduct, assessment of processes and provided MSDS of production partners, independent lab analytics, and certificates such an OEKO-TEX 100. This can also be verified by individual customers audit teams as well as by a third party audit. In place of these processes they use laser machines, special enzymes, and reusable artificial stones.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS) Certification.

Tarasima Apparels Limited did not source cellulose-based fibres from organic methods and did not verify this through Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS) Certification, as they have not produced any jeans yet. However, they are on track to meet this requirement and to verify it through these certifications.

d. Include post-consumer recycled content

Aimed to include 5% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by use of certified recycled fibres to the Global Recycled Standard (GRS) or Recycled Claim Standard (RCS).

Tarasima Apparels Limited did not include 5% post-consumer recycled content (by weight) and did not this through the Global Recycled Standard (GRS) or Recycled Claim Standard (RCS), as they have not produced any jeans yet. However, they are on track to meet this requirement and to verify it through these certifications.

Zamira Fashion

Headquarters
Hong Kong, Hong Kong

Website
https://zamira.com.hk/

Product launch
N/A

Category

Organisation description

Zamira Fashion Limited is the world's first garment manufacturer to launch denim with Oekotex Made in Green. Established in 2007 as a design label and product supplier, we have over 13 years of experience in the garment making industry. Over the years, we have progressively laid a firm foundation with our headquarters in Hong Kong, our sustainability-led development Denim Labs in Southern China and Bangladesh. Our vision is to bring about changes in the denim industry so as to pave the way forward for the most ethical, sustainable and eco-efficient supply chain. Our mission is to provide clients with outstanding services, innovative designs and ensure ethical, sustainable and transparent sourcing solutions for our denim products.

The Jeans Redesign by the Ellen MacArthur Foundation has three focused areas in its guidelines that are closely aligned with Zamira's very own sustainability-oriented initiative, Zamira Cares, that is driven by five main pillars – Fabrics & Materials, Safe to Wear & Traceability, Chemical Managements, New Technologies and Longevity & Circularity. We look forward to a transformative journey by joining the Ellen MacArthur Foundation and its journey on The Jeans Redesign. We are excited to be joined with other like-minded organisations with a commitment to reform the denim industry. Together we can pave the way forward for a truly ethical, responsible and sustainable supply chain!

Contact

Thomas Mueller, Managing Director, Zamira Fashion Limited

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Zamira Fashion Limited aimed to produce jeans in accordance with the Guidelines and produced a volume of such jeans, as initially committed, by May 2021. Volumes have been submitted to the Foundation only. With detailed guidelines and direct contact with The Jeans Redesign team, they were able to follow the guidelines thoroughly in their production to fulfil their commitment.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Zamira Fashion Limited's minimum test standard for jeans, which is:

- Dimensional Stability to Washing BS EN ISO 5077: 2008 / BS EN ISO 3759: 2011 / BS EN ISO 6330: 2012
- Appearance Assessment: Satisfactory
- Piling or Fuzzing of Surface Fibres BS EN ISO 12945-2
- Tensile Strength BS EN ISO 13934-2:2014; CRE-25mm grab
- Tearing Strength BS EN ISO 13937-1; Elmendorf Tear
- Seam Slippage BS EN ISO 13936-1
- Seam Strength BS EN ISO 13935-2
- Abrasion Resistance BS EN ISO 12947-2; Martindale Wear & Abrasion Tester; 9 kPa Pressure
- Security of Resistance BS EN ISO 12947-2; Martindale Wear & Abrasion Tester; 9 kPa Pressure
- Stretch & Recovery BS EN 14704-1, Method A-strip method
- Colour Fastness to Washing BS EN ISO 105-C06; Test No. A2S
- Colour Fastness to Water BS EN ISO 105-E01
- Colour Fastness to Rubbing BS EN ISO105-X12:2002
- Colour Fastness to Light BS EN ISO 105 B02
- pH Value ISO 3071:2005
- Free Formaldehyde Content ISO 14184-1:2011
- Azo Dyes EN 14362-1:2017
- Nickel Release European Standard EN 1811: 2011 with Amendment A1: 2015

Did not aim to verify this by a third party verification.

Zamira Fashion Limited tested jeans for 30 home laundries and performed 18 durability tests to meet their minimum test standard for jeans. Before production, they used a third party verification company called Bureau Veritas to ensure products are in line with what they are promoting under The Jeans Redesign guidelines to their customers. Some of their customers have their own selected third party verification company which is in line with their guidelines and requirements which they will then follow during bulk production.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by lab testing from the beginning of the production process.

Zamira Fashion Limited included an easily accessible label with the information stated above, verified by lab testing. They provide customers the option to use printed 100% organic cotton pocket bags with the information of the care label on it. This eliminates the need for any additional labelling.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by composition test and quality checks on the care labels.

Zamira Fashion Limited ensured material composition met a 98% cellulosic minimum and verified this by composition test and quality checks on the care labels. In particular, once the order is placed and they know the fabric components of the fabric, they calculate internally to verify it before proceeding with production. Upon their customer's request they also performed a third party verification.

b. Enable easy disassembly of any additional components added to the fabric

Aimed to enable easy disassembly of any additional materials that are added to the fabric. In addition, aimed to include Oekotex Made in Green hang tag which includes a QR code to scan and verify the garment, which is easy to remove through an easy procedure of removing the tag.

Zamira Fashion Limited ensured easy disassembly of any additional materials that are added to the fabric. In particular, they used easily removable and reusable shank buttons. They can be removed manually by just pushing the shank buttons out from the button holes on the waistband during end of garment lifespan. In addition, the Oekotex Made in Green tag comes in a hang tag attached to the garment belt loop which can be easily manually removed and recycled.

c. Remove rivets entirely or reduce them to a minimum

Aimed to remove metal rivets entirely or reduce them to a minimum.

Zamira Fashion Limited ensured jeans do not have metal rivets for most stylings. In addition, Zamira is actively initiating sustainable metal trims that are reusable to ensure that even if metal rivets are needed to be used, they are easily removable from the Jeans during recycling.

d. Use The Jeans Redesign logo

Aimed to use The Jeans Redesign logo. Aimed to mention to customers the possibility to include the logo on the tags and use it subjected to their approval.

Zamira Fashion Limited did not ensure The Jeans Redesign logo was used. Zamira received very positive responses from customers wanting to be participants and using The Jeans Redesign logo. They have been mentioning to customers the use of the logo on the tags and it will be subject to their approval.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Zamira Fashion Limited aimed to verify this through the ZDHC Gateway, Higg Index and Oekotex STeP.

Zamira Fashion Limited ensured jeans use chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway, Higg Index and Oekotex STeP.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this implementing strict Code of Conduct and guidelines that authenticates production partners following the highest level of technical and environmental conditions. Additionally, aimed to comply with this with the use of technologies like laser, nanobubbles and ozone, alongside other alternatives to PP and bleaching. These are measured with EIM (Environmental Impact Measuring) software.

Zamira Fashion Limited prohibited the use of the chemicals and processes above. Apart from implementing their own strict Code of Conduct and guidelines, their partnering factories are certified with Oekotex STeP which follows through a series of standards set by Oekotex. This consists of additional chemical requirements to be compiled under their Oekotex Detox to Zero certification. In particular, they replaced prohibited chemicals and process with the following:

a. Conventional electroplating – on the trims, eco-plating has been used. The eco-plating eliminates chemicals that have been used on conventional plating processes.

b. Potassium permanganate – since April 2020, they have successfully eliminated it with a sustainable alternative that is certified ZDHC Level 1.

c. Stone finishing – with the NoStone technology, laser technology, ozone system and nanobubbles system, they are able to achieve stone finishing effects without having to use any pumice stone.

d. Sand blasting – This has been completely eliminated from their developments and production many years ago. In substitute, they use sustainably certified eco potassium permanganate.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this by Organic Content Standard (OCS). In addition, in Zamira, these fibres are not only limited to cotton, but have extended into Refibra, Tencel, and mixed hemp.

Zamira Fashion Limited sourced cellulose-based fibres from organic methods and verified this through Organic Content Standard (OCS).

Zamira Fashion Limited reported that meeting this requirement has been challenging due to the price and the supply shortage of organic cotton.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. Zamira reported that this would be another point of concern as having PCRC as part of the fabric composition would call for incurring additional costs. As a consequence, customers who are price-sensitive may not be able to buy it.

Fabric mills

Advance denim

Headquarters
Foshan City, Guangdong, China

Website
https://www.advancedenim.com/

Product launch
N/A

Category

Organisation description

Advance Denim has the distinction of being the oldest denim manufacturer in China and has dedicated its efforts around the core beliefs of innovation, service, quality, people and sustainability. These core beliefs drive our efforts at being a world leader in denim. Sustainability has been a key focus and we have set industry leading goals and results. We have invested heavily in a new dye technology called Big Box dying that reduces the number of dye boxes to just one Big Box and has up to 95%water savings while using true indigo dye to give you the real vintage wash down.

We have also set the aggressive strategic plan of using 90% green fibres in all of our styles over the next five years.

This focus on innovation does not take away our drive to be a world leader in innovation. This drive for innovation has created close to 40 new patents granted or pending in 2018/2019 and more to come in 2021. We believe that sustainability and innovation can be achieved in tandem but our long-term success will be merging innovation, sustainability and true vintage denim aesthetic.

Contact

Mark Ix, Director of Marketing in US, Advance Denim

Michael Lam, Director, Advance Denim

Alice Chan, Marketing Manager, Advance Denim

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

Advance Denim aimed to produce denim fabric (in accordance with the Guidelines) and met this commitment by May 2021. Volumes have been submitted to the Foundation only. Advance Denim has used the Jeans Redesign guidelines to develop a fabric that is more durable, more environmentally friendly and more recyclable.

Advance Denim stated that the Jeans Redesign guidelines run parallel to their values, thus meeting the commitment has been a challenge that the company had already fully embraced.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Advance Denim's minimum test standard for denim fabric, which is:

- Tensile strength test ASTM D5034 &
- Tear strength test ASTM 01424

Advance Denim tested fabric for 30 home laundries and performed two durability tests (tensile strength and tear strength) to meet their minimum test standard for fabric. Advance Denim has produced fabric that meets the Jeans Redesign's durability requirement through the use of longer staple cotton and added weight to the garment. Advance Denim has increased the average weight of their denim to 12oz from 10oz. This added weight aids in producing a quality garment that will stand the test of time.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying
- No chlorine bleach

Aimed to verify this with a third party testing company

Advance Denim did not include an easily accessible label with the information stated above, as it is their customers' responsibility to add labels to their garments. However, Advance Denim advised a suggested care label with the information stated above to customers for consideration. Advance Denim reported that their customers generally get their own care labels verified by a third party lab.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this using a fibre content analysis test.

Advance Denim ensured material composition met a 98% cellulosic minimum and verified this by fibre content analysis test. Advance Denim performs a fiber content analysis test on every style that they produce. In developing styles for the Jeans Redesign project, Advance Denim made sure that those styles met the 98% cellulosic minimum composition.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use the Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

Advance Denim ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway. Advance Denim is a ZDHC contributor and is the only listed denim manufacturer in China. Advance Denim is also BLUESIGN SYSTEM PARTNER certified. Advance Denim has adopted aniline free indigo and just introduced a Hydrosulfite free indigo called Bio Blue.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by the ZDHC Gateway.

Advance Denim implemented ZDHC Wastewater Guidelines and verified this through the ZDHC Gateway. In addition to this, Advance Denim's whole production process complies with STeP by OEKO-TEX certification and they are in the process of joining "Made In Green" by OEKO-TEX. Advance Denim also introduced Big Box dyeing, an indigo dye process that reduces water use by 93% , wastewater by 97%, energy by 41% and chemicals by 25%.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and ensure volume of wastewater produced is treated to specifications a2 (above).

Advance Denim ensured the wastewater volume created was a maximum of 0.025m3/yard. The wastewater volume created for Advance Denim's fabric was about 0.011 m3/yd in 2020 and they are continually improving their production process and implementing new facilities to reuse process water in order to reduce wastewater created during the manufacturing process. Advance Denim has installed a reverse osmosis system to recycle about 40% treated wastewater and put it back into the production process to reuse, thus reducing wastewater discharge. Advance Denim has invested in closed loop finishing.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from regenerative (or in the short-term organic or transitional) farming methods. Aimed to verify this by Organic Content Standard or Global Organic Textile Standard (GOTS).

Sourced cellulose-based fibres from regenerative (or in the short-term organic or transitional) farming methods, and verified this through Organic Content Standard or Global Organic Textile Standard (GOTS). Advance Denim is using more organic cotton every year: the volume of organic cotton used in 2020 was increased by 133% compared to 2018.

d. Include post-consumer recycled content

Did not aim to include any post-consumer recycled content on average (by weight) of the total fabric.

Advance Denim did not include post-consumer recycled content (by weight), however in future they aim to produce fabric with 5% post-consumer recycled content and verify that with Global Recycled Standard (GRS) or Recycled Claim Standard (RCS) certification. The share of recycled materials used in Advance Denim's production in 2020 was four times higher than that of 2019.

Artistic Fabric Mills

Headquarters
Landhi Town, Karachi, Karachi City, Sindh, Pakistan

Website
https://www.artisticfabricmills.com/

Product launch
N/A

Category

Organisation description

Established in 1949 in Karachi, AFM is one of Pakistan's leading premium denim manufacturers. We believe in consistently moving towards a better product and a better world by acquiring technologies that ensure we offer customers a superior quality product while maintaining sustainable practices to protect our community and the environment. We are determined to invest in renewable energy, explore new ways to reuse production waste and bridge differences through global collaborations. We are fully aligned with The Jeans Redesign mission.

Contact

Haya Iqbal Ahmed, Director, Artistic Fabric Mills

Ameer Hussain Thebo, Chief HR and Sustainability Officer, Artistic Fabric Mills

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

Artistic Fabric Mills produced the total volume of denim fabric (in accordance with the Guidelines) initially committed to by May 2021. Volumes have been submitted to the Foundation only. Artistic Fabric Mills believes in using environmentally friendly and recyclable materials which have minimal environmental impact. Their in-house LA ROCHE Shredding Plant (cotton recycling plant) and their Double Zero and Triple Zero Technology (zero wastewater dyeing, finishing, and laundry processes) are helping them meet the Jeans Redesign guidelines. Furthermore, their operations and products have Global Organic Textile Standard (GOTS), Recycled Claimed Standard (RCS) and Global Recycled Standard (GRS) and Cradle to Cradle Certified®, confirming the authenticity and traceability of raw material and finished products as per internationally recognised compliance standards.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce jeans in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Artistic Fabric Mills (Private.) Limited's minimum test standard for jeans, which is:

- Artistic Fabric Mills at in-house lab
- Colour Fastness to Washing ISO 105-C06
- Colour Fastness to Water ISO 105-E01
- Colour Fastness to Perspiration ISO 105-E04
- Colour Fastness to Rubbing ISO 105-X12
- Tear Force ISO 13937-1
- Tear Force (Tongue) ISO 13937-2
- Tensile Strength (Grab) ISO 13937-2
- Seam Slippage ISO 13936-1
- Seam Strength 13935-2
- Pilling Resistance ISO 12945-2
- Fabric Weight ISO 12127-1
- Elastic Behaviour ISO 14704-1 Method A
- pH ISO 3071
- Stretch and Recovery ASTM D 3107
- Domestic Washing and Drying Cycle ISO 6330
- Abrasion Resistance ISO 12947-2

In addition to this, Artistic Fabric Mills (Private.) Limited claimed to be Oeko Tex 100 Class I product certified.

Artistic Fabric Mills (Private.) Limited tested jeans for 30 home laundries and performed 17 durability tests (as stated above) to meet their minimum test standard for jeans. They verified this through their in-house testing laboratory to perform fabric testings.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce jeans in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by a third party physical testing lab.

Artistic Fabric Mills (Private.) Limited included an easily accessible label with the following information stated above:

- Methodology for reducing washing frequency
- Technology utilized for washing at low temperatures (30 degrees or below)
- Necessary instructions, training, and awareness to employees to avoid tumble drying

Artistic Fabric Mills (Private.) Limited are in the process of verifying this by a third party physical testing lab.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by material composition testing, and claimed to be able to produce the relevant certification if requested.

Artistic Fabric Mills (Private.) Limited ensured material composition met a 98% cellulosic minimum and verified this through transaction certificate, which is issued by a third party certification body called Control Union.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Aimed to offer the logo application to customers and use it upon their agreement.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway and IPE platform and Cradle to Cradle Certified® at the Gold level. The test reports are uploaded on ZDHC gateway portal by third party testing lab. Published and verified by ZDHC.

Artistic Fabric Mills exceeded their aim and the minimum requirement by complying with Cradle to Cradle product certification standard at Gold level. This is continuously being assessed and is verified through the ZDHC Gateway and IPE platform and Cradle to Cradle Certified® at the Gold level. The test reports are uploaded on ZDHC gateway portal by a third party testing lab that is published and verified by ZDHC.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Artistic Fabric Mills is treating 100% industrial wastewater through WWTP according to ZDHC wastewater guideline version 1.1 published in July 2019. The test reports are uploaded on ZDHC gateway portal by a third party testing lab. Published and verified by ZDHC.

Artistic Fabric Mills has implemented the ZDHC Wastewater Guidelines 2019 that are continuously subjected to adaptation to the ZDHC standard. This is verified by reporting wastewater data through the ZDHC Gateway and IPE Platform by publishing up to date information regarding their various wastewater treatment processes on the portal along with verified test reports.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Artistic Fabric Mills ensured the wastewater volume created was a maximum of 0.025m3/yard and was treated to specifications a2 (above).

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting, and to verify this by Cradle to Cradle (C2C) certified product standard at Gold level. Aimed to use laser instead of chemical. Aimed to not use pumice stones. Aimed to verify this by clean chain portal-ZDHC gateway portal.

Artistic Fabric Mills prohibited the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting, and verified this by uploading all their chemical inventories on the ZDHC Gateway Clean portal.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods, and to verify this through the Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS). In addition, a Transaction Certificate is issued after every shipment or transaction by the certification body (Control Union) which is also a known source to verify the claim of the contents.

Artistic Fabric Mills sourced cellulose-based fibres from organic methods and verified this through the method stated above.

d. Include post-consumer recycled content

Aimed to include a minimum of 5% pre-consumer recycled content (white cotton) and to verify this with Recycled Claim Standard (RCS).

Artistic Fabric Mills included a minimum of 5% pre-consumer recycled content (white cotton) and verified this with Recycled Claim Standard (RCS). Additionally, they report that on request this percentage can be increased to 100%.

Arvind Limited

Headquarters
Ahmedabad, India

Website
https://www.arvind.com/

Product launch
N/A

Category

Organisation description

Arvind ranks amongst the top denim manufacturers worldwide and its products are known for being innovative and sustainable. At Arvind, we intend to apply the concept of circularity holistically and expand the scope beyond fibres and adopt a circular production system which looks at all the input resources and end of life. Our intent is to establish a regenerative model for our industry which nurtures and does not cause unnecessary environmental harm. We believe our approach aligns with the Jeans Redesign and we can make significant progress due to this collaboration.

We intend to follow the Guidelines for developing and supplying the fabrics made in accordance with the design requirements and to encourage our customers to adopt it, in addition to fulfilling the demand from existing Jeans Redesign partners. "Arvind has been working extensively on bringing circularity concepts to the denim industry for the last five years. We hope to accelerate these efforts in a collaborative manner by engaging in the Jeans Redesign which will help in formalising the technical requirements and scaling the ambitions by all industry actors."

Contact

Aamir Akhtar, CEO, Arvind Limited

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

Arvind Limited did not produce any bulk fabric (in accordance with guidelines) by May 2021. Arvind developed a range of denim fabrics as per the Jeans Redesign guidelines. However, they did not receive any orders from brands for Jeans Redesign fabrics, due to a challenging business situation caused by the pandemic. Hence these fabrics were not sold commercially.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Arvind Limited's minimum test standard for denim fabric. Aimed to verify this by:

- Appearance: CA-TM 02
- Dimensional stability ISO 6330 (as part of CA TM 02)
- Tensile force ISO 139342
- Seam force ISO 13935-2
- Abrasion ISO 12947-2

Arvind Limited did not test fabric for 30 home laundries and did not perform five durability tests, as they have not produced any fabric yet. However, during their fabric development process, they have tested following fabric parameters and compared with internal fabric standard: Tensile strength, Appearance after wash, Abrasion Resistance. They need more clarity from individual brands regarding test methods and minimum standards as few of the parameters are failing as per raw fabric standard.

b. Provide visible information on the garment to appropriately care for the jeans

Did not aim to include an easily accessible label with care information, because this is not relevant for the fabric mill as care labels are provided by garment manufacturers based on the directions from brands.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Arvind Limited did not ensure material composition met a 98% cellulosic minimum, as they have not produced any fabric yet. However, they are on track to meet this as they produce a range of fabrics with 98%, 99% and 100% cellulose based fibres. They provide blend test reports in each fabric's technical data sheet.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use the Jeans Redesign logo.

e. Use technology that enables sorting

Aimed to explore technology that enables automated sorting.

Arvind Limited did not ensure technology that enables sorting was used, as they have not produced any fabric yet. They are evaluating and testing various sorting technologies currently being developed. However, none of these technologies are commercially available yet. They plan to continue to evaluate these and connect them to their textile recycling plant. Currently, the sorting is being done manually before recycling.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure jeans are free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Arvind Limited aimed to verify this through the ZDHC Gateway.

Arvind Limited did not ensure jeans use chemicals that comply with Level 1, ZDHC MRSL and did not verify this through the ZDHC Gateway, as they have not produced any fabric yet. However, 100% of the chemicals used in their denim manufacturing mill are compliant with ZDHC MRSL Level 1. An external audit was conducted by Bureau Veritas to confirm this status.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Did not aim to implement the ZDHC Wastewater Guidelines.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Did not aim to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by chain of custody standards and/or certificates for organic cotton. Aimed to be able to provide Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS) certifications.

Arvind Limited did not source cellulose-based fibres from organic methods, as they have not produced any fabric yet. However, Arvind is implementing organic cotton and regenerative organic cotton projects with farmers in India. Based on the fabric order requirement, Arvind is able to provide Global Organic Textile Standard (GOTS) certified fabric products.

d. Include post-consumer recycled content

Aimed to include at least 5-40% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by Global Recycled Standard (GRS) and/or Recycled Claim Standard (RCS) certifications for fabrics.

Arvind Limited did not include 5-40% post-consumer recycled content (by weight) as they have not produced any fabric yet. However, Arvind has a product range called 'Renaissance' which includes all products with post-consumer recycled content. They are commercially selling products with different levels of recycling contents, ranging from 5% to 40%. They are also manufacturing products with pre-consumer recycled content. All the products with recycled content come with Global Recycled Standard (GRS) and/or Recycled Claim Standard (RCS) certifications.

Cone Denim

Headquarters
Greensboro, North Carolina, United States

Website
https://www.conedenim.com/

Product launch
N/A

Category

Organisation description

As a leader in denim innovation, Cone Denim is committed to sustainable innovation and responsible manufacturing to create unique performance and vintage-inspired denim fabrics. We look for opportunities to collaborate with like-minded partners to identify and lead initiatives that make a difference and bring positive change and new approaches throughout the fashion supply chain. As part of the new Elevate Textiles, Cone Denim looks for opportunities to build on our sustainability initiatives and advance our global leadership. We recently established 2025 Sustainability goals focused on driving initiatives to responsibly source fibres, reduce water consumption and lower greenhouse gases. The Ellen MacArthur Foundation's Jeans Redesign movement aligns with our passion to effect positive change, and we are excited to be a mill partner and part of the transformation.

Contact

Shelby Arnold, Corporate Sustainability Manager, Cone Denim

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

Cone Denim aimed to produce denim fabric (in accordance with the Guidelines) and met this commitment by May 2021. Volumes have been submitted to the Foundation only. While the requirements for compliance all fell into Cone Denim's standard capabilities and practices, The Jeans Redesign helped pull through all these initiatives and brought together mills, brands, and the end customer.

Being a part of this program has been a valuable tool for Cone Denim to communicate a variety of existing sustainable practices. A challenge Cone Denim foresees with the guidelines as the project grows is the limitation on fabric stretch performance, due to the 98% cellulosic requirement.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Cone Denim's minimum test standard for denim fabric, which is:

- The fabric should test at a minimum of 65% of original strength after 30 home laundries
- Use the following tests: Rigid Tear-ASTMD 1424, Rigid Tensile-ASTMD 5034

Cone Denim tested fabric for 30 home laundries and performed the three durability tests (strength, rigid tear and rigid tensile) to meet their minimum test standard for fabric.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying
- Use non-chlorine bleach if needed

Aimed to verify by specification sheets provided to the garment manufacturer.

Cone Denim included an easily accessible label with the information stated above, verified by specification sheets.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by purchase records and third party testing.

Cone Denim exceeded a material composition of 98% cellulosic minimum and provided a fabric that is made out of 100% cellulosic fibers. This was verified by third party testing.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use the Jeans Redesign logo on the fabric to ship to the garment manufacturer.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

Cone Denim ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway and the generation of InCheck reports. The ZDHC account ID for each of Cone Denim's three plants can be checked in the ZDHC Gateway:

- Cone Denim Jiaxing – A497WA12
- Cone Denim Parras – A785NO65
- Cone Denim Yecapixtla – A473QJ44

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by reporting wastewater data through the ZDHC Gateway.

Cone Denim has implemented ZDHC Wastewater Guidelines at each of their facilities. They follow the guidelines' cadence by testing twice per year, develop Corrective Action Plans if needed, and verify this by reporting the wastewater data through the ZDHC Gateway. Cone Denim has been aligned with ZDHC for a few years now.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Initially aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard or below. Aimed to ensure the produced wastewater is treated to the specifications of a2 (above).

Cone Denim ensured the wastewater volume created was a maximum of 0.025m3/yard and was treated to specifications a2 (above). Cone Denim's water use intensity in each of their facilities is <0.023 m3/yard and their average wastewater volume is 10% less due to evaporation. Cone Denim does not track wastewater in the same way that they measure fresh water usage, but from this data they can state that the wastewater volume requirement is met. Cone Denim's water usage has been within this guideline target since 2016.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic farming methods. Aimed to verify this by Global Organic Textile Standard (GOTS) or similar Organic Cotton program documentation that provides transparency into the organic cotton origin for the supplier and the brand.

Cone Denim sourced cellulose-based fibres from organic farming methods. Each of their facilities is Organic Content Standard (OCS) certified, ensuring traceability of organic inputs, and their supplier is verified through Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS).

d. Include post-consumer recycled content

Aimed to include 5% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by Recycled Content Standard (RCS) Certification.

Cone Denim included 5% post-consumer recycled content (by weight) and verified this through Recycled Content Standard (RCS) certification. Cone Denim was able to use an existing relationship with a recycled cotton supplier and include a recycled cotton component in their fabric that is at least 5% by weight of the finished product.

DNM Denim

Headquarters
Damietta Desert, Damietta Governorate, Egypt

Website
http://www.dnmdenim.com/

Product launch
N/A

Category

Organisation description

DNM Denim Mill was established in 2011 in Damietta, Egypt, as a new investment by the Eroglu Group. With a team of experienced and professional staff, our environmentally friendly production approach and a young and dynamic organisational structure, DNM has quickly become recognised as one of the world's leading denim producers. We've developed a unique reputation for our high-quality denim collections, offering a wide variety of colours, constructions and special textures in its fabrics. Producing a range of timeless and next-generation fabrics with vintage touches, today we're working with well known denim brands and retailers throughout the industry.

DNM is a truly modern facility, designed and engineered with the latest equipment and processes to minimise our environmental impact. Sustainability is therefore at the heart of everything we do. We embed the values of circular economy and up-cycling in every founding principle with a 'zero waste system' and continue to support this system by developing sustainable processes and using sustainable fibers. Because of this, the 'Make Fashion Circular' initiative sits perfectly within DNM's sustainability mentality and we are proud to be participating in the Jeans Redesign project.

Contact

Gökhan Ünsal, Deputy General Manager, DNM Denim

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

DNM Denim produced the total volume of denim fabric (in accordance with the Guidelines) initially committed to by May 2021. Volumes have been submitted to the Foundation only. In particular, 51% of DNM Denim's total production in 2020 consisted of fabrics made from 98% cellulose based as a minimum. To date, 56% of DNM Denim's total production in 2021 consisted of fabrics made from 98% cellulose based as a minimum. Therefore, the Jeans Redesign guidelines did not pose any difficulties for them and It complies with the demands of their customers.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet DNM Denim's minimum test standard for denim fabric, which is:

- Dimensional stability ISO 6330
- Abrasion - ISO 12947-2
- Tensile force ASTM D 5034
- Seam slippage ASTM D 1683
- Tear strength ASTM D 1424
- Colour fastness to rubbing ISO 105 - X12
- Colour fastness to crocking - AATCC 8
- Colour fastness to water ISO 105 - E01
- Stretch and recovery ASTM D 3107
- Colour fastness to perspiration - ISO 105 E04
- pH ISO 3071
- Visual inspection of fabric

DNM Denim tested fabric for 30 home laundries and performed 12 durability tests (Dimensional stability ISO 6330, Abrasion - ISO 12947-2, Tensile force ASTM D 5034, Seam slippage ASTM D 1683, Tear strength ASTM D 1424, Colour fastness to rubbing ISO 105 - X12, Colour fastness to crocking - AATCC 8, Colour fastness to water ISO 105 - E01, Stretch and recovery ASTM D 3107, Colour fastness to perspiration - ISO 105 E04, pH ISO 3071, Visual inspection of fabric) to meet their minimum test standard for fabric.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

Aimed to verify this by the presence of a care label attached to the technical data sheet and by in-house laboratory.

DNM Denim included an easily accessible label with the information stated above, verified by the presence of a care label attached to the technical data sheet and by in-house laboratory.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by accredited QA third party test labs.

DNM Denim ensured material composition met a 98% cellulosic minimum and verified this by accredited QA third party test labs upon specific request from the customer.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use the Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway

DNM Denim ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by reporting wastewater data through the ZDHC Gateway.

DNM Denim implemented ZDHC Wastewater Guidelines and verified this through ZDHC Gateway.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above). They have a water treatment unit with zero liquid discharge (ZLD) technology. There is not any production process wastewater. Aimed to verify this through the Water Footprint Certification 2019.

DNM Denim ensured the wastewater volume created was a maximum of 0.025m3/yard and was treated to specifications a2 (above) and verified this through the Water Footprint Certification 2019.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Organic Content Standard (OCS) and/or Global Organic Textile Standard (GOTS).

DNM Denim sourced cellulose-based fibres from organic methods and verified this by Organic Content Standard (OCS) and Global Organic Textile Standard (GOTS).

d. Include post-consumer recycled content

Aimed to include 20% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by use of certified recycled fibers (Global Recycled Standard (GRS) or Recycle Claim Standard (RCS)).

DNM Denim included 20% post-consumer recycled content (by weight) and verified this through use of certified recycled fibers (Global Recycled Standard (GRS) and Recycle Claim Standard (RCS)).

HANTEX

Headquarters
Friskney, United Kingdom

Website
http://www.HANTEX.co.uk/

Product launch
N/A

Category

Organisation description

HANTEX is one of Pakistan's premier spinning mills and denim fabric manufacturers. Rated as one of Pakistan's top exporters for over a decade, HANTEX has a capacity to produce over 100,000 pounds of yarn daily. HANTEX has invested heavily in sustainable technologies and practices, and also utilizes organic cotton, sustainable alternative raw materials as well as recycled fibers within fabric and yarn production.

The Jeans Redesign mirrors HANTEX's commitment toward sustainability and transparency within the textile industry. Participating in this initiative provides a tangible and meaningful way for HANTEX to contribute to the global efforts toward a circular economy.

Contact

Mariyah Farhan, Director, HANTEX

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

HANTEX aimed to produce denim fabric in accordance with the Guidelines and produced a volume of such fabric, as initially committed, by May 2021. Volumes have been submitted to the Foundation only.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet HANTEX's minimum test standard for denim fabric, which is:

- Tear strength (force) ISO 13937-1
- Tear strength (force) ISO 13937-2
- Tensile strength (Grab) /S013934-2
- Seam Strength iso 13935-2
- Seam Slippage ISO 13936-2
- Stretch & Recovery ASTM D 3107
- Rubbing Fastness ISO 105-12
- Washing ISO 6330
- pH ISO 3071
- Weight Scale ISO 12127-1
- Colour fastness to washing 105-C06
- Colour fastness to water 105-E01
- Colour fastness to perspiration 105-E04

Aimed to verify this with tests performed at their in-house lab.

HANTEX tested fabric for 30 home laundries and performed the following durability tests to meet their minimum test standard for fabric:

- Maximum cellulose base composition, less aggressive wash treatments
- Color fastness to light ISO 105 B02 (48 Hrs)
- Color fastness to rubbing ISO 105 B02 (48 Hrs)
- Color fastness to washing ISO 105 C06 (A2s)
- Color fastness to perspiration SO 105 E04 (Alkaline)
- Color fastness to perspiration SO 105 E04 (Acidic)
- Color fastness to water ISO 105 E01
- Color fastness to Ozone ISO 105 GO3 (1 cycle)
- Home laundry SO 105 6330
- pH Value ISO 3071
- Tear strength ISO 13937-2
- Pilling Resistance ISO 12945-2
- Abrasion ISO 12947-2/ AC
- Fabric weight ISO 12127-1
- Stretch & Recovery

This was verified with tests performed at their in-house lab.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

If the fabric needs caution due to a special process, the care instruction may be provided to the garment manufacturer through different communication channels including email, specs sheet, labels etc.

HANTEX did not include an easily accessible label with the information stated above. Being a fabric mill, they share these instructions with garment manufacturers through the Fabric Technical Data Sheet.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by lab testing.

HANTEX ensured material composition met a 98% cellulosic minimum and verified this by internal lab testing.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use the Jeans Redesign logo, as it wasn't requested by customers.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

HANTEX ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this by ensuring data is regularly updated on the ZDHC Gateway. At the moment, HANTEX has also included some ZDHC MRSL level 3 chemicals in its processes.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by reporting wastewater data through the ZDHC Gateway and IPE Platform.

HANTEX implemented ZDHC Wastewater Guidelines and verified this through the ZDHC Gateway and IPE Platform.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above).

HANTEX ensured the wastewater volume created was a maximum of 0.025m3/yard and did not treat it to specifications a2 (above). The wastewater created for denim in HANTEX is 0.016m3/m. HANTEX has achieved this through Caustic Recovery plant and waterless finishing technique. Their aim is to reduce it further through wastewater recycling and eco-friendly chemicals.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS) Transaction Certificates.

HANTEX sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) certifications.

d. Include post-consumer recycled content

Aimed to include 5% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. Aimed to verify this by Global Recycled Standard (GRS) and/or Recycled Claim Standard (RCS) Transaction Certificates.

HANTEX included 5% post-consumer recycled content (by weight) and verified this through Global Recycled Standard (GRS) and Recycled Claim Standard (RCS) Transaction Certificates. Hantex has made fabrics with different recycled content according to customer requirements. Since the suggested Jeans Redesign minimum criteria was 5%, all fabrics contain at least 5% post-consumer cotton. The maximum share of post-consumer recycled cotton included in HANTEX's Jeans Redesign products was 20%. For fabrics with less than 20% post-consumer recycled content, Global Recycled Standard (GRS) issues the certificate. For fabrics with more than 20% post-consumer recycled content, Recycled Claim Standard (RCS) issues the certificate.

House of Gold - Blue Diamond Denim

Headquarters
Los Angeles, California, United States

Product launch
N/A

Website
https://www.houseofgold.la/

Category

Organisation description

Blue Diamond was founded in 1958 as a cotton mill. In 1996 they committed themselves to specializing in denim production. Collaborating with the "Godfather of Denim," Adriano Goldschmied since 2012, Blue Diamond changed its focus on innovation and sustainability. Blue Diamond is committed to a greener future with its willingness to use cotton blends with sustainable recycled fibres from Lenzing, Lycra, Unifi and its continued expansion of its recycled cotton, organic cotton and natural fibres offerings. To align with our environmental responsibilities, we are working diligently with third party certification organizations. We hold certificates from Higg, GRS, RCS, ISO and others for our recycled and organic cottons. With the spirit of product development, we are looking at all aspects of denim production to make a change towards efficiency, sustainability, and circularity. We believe Ellen MacArthur Foundation and the Jeans Redesign participation is bringing forth the needed awareness to the public. "I've been a fan of Ellen MacArthur since she was sailing, now I realise that that's not the only interest we have in common, we also share the will and drive to work for a better future. For the second part of my career, once I realised how much our methods of working were hurting the planet, I have been committed to pioneer and promote sustainability in the denim industry. I was among the first to understand that technology needs to be coupled with determination to want to do better, and commitment to change to propel things forward. This is what I admire and like so much about the Ellen MacArthur Foundation, they go straight to doing the actual work as opposed to just talking about it. A hands on method which I can relate to. When I met Blue Diamond, they were a representation of an old mill, working in the same way they had for a long time in one of the most polluted areas in China. House of Gold's goal was to show how from such a dire situation you can always grow and drastically change for the better, Blue Diamond is now one of the leaders in innovation and research. It's been a challenge to transition to more sustainable methods, as opposed to starting a whole new mill from scratch, then again, I've always liked a challenge. This should be an example that it can be done."

Contact

Adriano Goldschmied, President / Founder, House of Gold

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

House of Gold - Blue Diamond Denim aimed to produce denim fabric (in accordance with the Guidelines) and met this commitment by May 2021. Volumes have been submitted to the Foundation only.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet House of Gold - Blue Diamond Denim's minimum test standard for denim fabric, which is:

- ASTM D-1424 (Tear test)
- ASTM D-5034 (Tensile test)
- ISO testing upon client request.

House of Gold - Blue Diamond Denim tested fabric for 30 home laundries and performed two durability tests (tear test and tensile test) to meet their minimum test standard for fabric, verified by OEKO-TEX standard, and ISO 14001.

b. Provide visible information on the garment to appropriately care for the jeans

Did not aim to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the care information, because this depends on clients' brand care instructions.

House of Gold - Blue Diamond Denim did not include an easily accessible label with the information stated above. As a mill, they always advise to reduce washing or using chemicals such as bleach to prevent decolorization, but this is beyond their control.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. 80% of House of Gold - Blue Diamond Denim's total production meets this requirement already.

House of Gold - Blue Diamond Denim ensured material composition met a 98% cellulosic minimum and verified this by Intertek.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use the Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting. However they are talking to a few companies on marking their fibres for traceability.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. House of Gold - Blue Diamond Denim has joined ZDHC in August 2019, but due to a Chinese NGO law they are not allowed to accept Chinese contributors at this moment. House of Gold - Blue Diamond Denim is compliant with the requirements of the ZDHC MRSL. Aimed to verify this through Intertek.

House of Gold - Blue Diamond Denim ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this through Intertek. House of Gold - Blue Diamond Denim has overcome the challenge related to the Chinese law by relying on certified laboratories, such as Intertek and SGS, that can verify MRSL based on ZDHC requirements .

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by reporting wastewater data through the ZDHC Gateway.

House of Gold - Blue Diamond Denim implemented ZDHC Wastewater Guidelines and verified this through Intertek.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above). Their average wastewater is at 0.010m3/yd. The produced volume of wastewater is treated to the ZDHC Wastewater Guidelines.

House of Gold - Blue Diamond Denim ensured the wastewater volume created was a maximum of 0.025m3/yard and was treated to specifications a2 (above).

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS) certified organic cotton.

House of Gold - Blue Diamond Denim sourced cellulose-based fibres from organic methods and verified this through the Global Organic Textile Standard (GOTS) 5.0.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content. However, currently 10% of their total production is from pre-consumer (or post-industrial) recycled content. As more fibre companies provide recycled products, their goal is to have 50% of their production made with pre-consumer content. This cotton is Global Recycled Standard (GRS) and Recycle Claim Standard (RCS) certified and they work very closely with Lenzing to increase usage of Refibra fibres. House of Gold - Blue Diamond Denim currently does not use any post-consumer recycled content because they do not have a reliable source yet.

KG Fabriks

Headquarters
Coimbatore, India

Website
https://kgfabriks.com/

Product launch
N/A

Category

Organisation description

KG Fabriks is proud to be associated with the Future of Fashion by being India's only "TRUE SUSTAINABLE" denim fabric manufacturer. We have two registered trademark denim products; GREEN DNM and PRODUCT ZERO. For the first time in the world, we launched natural, plant based, machine dyed, indigo denim products under the brand name "Nature's Blue". We have been awarded first prize in Industrial Water Conservation by Ministry of Water Resources, Government of India for the year 2018.

We are also a GreenCO Gold certified company. All our qualities are certified Green Products by TUV NORD. We are Oeko-Tex, GOTS, BCI, GRS, RCS, ISO, ZDHC Certified. We have become a signatory of The Jeans Redesign to get ourselves associated with like minded people who are thriving to take sustainability to the next level.

Contact

Mr Srihari Balakrishnan, Managing Director, KG Fabriks

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

KG Fabriks aimed to produce denim fabric (in accordance with the Guidelines) and met this commitment by May 2021. Volumes have been submitted to the Foundation only. By virtue of the measures KG Fabriks adopts and the "Green Denim"concepts they follow in their factory, most of their qualities fall under the guidelines irrespective of whether those products are produced for Jeans Redesign participants or not.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet KG Fabriks's minimum test standard for denim fabric. Aimed to verify this by third party test report such as SGS or ITS.

KG Fabriks tested fabric for 30 home laundries and performed three durability tests (Tensile Strength, Tear Strength, Seam Slippage) to meet their minimum test standard for fabric. By using yarns with required CSP and choosing the fabric construction parameters appropriately, their fabrics met the above required parameter of withstanding 30 home laundries. KG Fabriks has their own in-house testing laboratory with all equipment to test the yarn parameters and fabric physical parameters of Tensile Strength, Tear Strength, Seam Slippage, apart from the Color Fastness testing facility. Hence, they performed the 30 home laundries tests in their own laboratory using the ASTM D 5034 (Tensile Strength), ASTM D 1424 (Tear Strength) and ASTM D 434 (Seam Slippage) methods and verified the results with internationally accepted Levi's testing protocols.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

Jeans produced to the Guidelines will include an easily accessible label that will include the following information:.

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying
- KG Fabriks will give the precaution details in case of special fabrics.

KG Fabriks did not include an easily accessible label with the information stated above because, being a denim fabric manufacturing company, care label is not applicable for them. Whenever they sell any "Value Added Denim Fabrics", they inform about precautions to be taken in garment washing. General wash care instructions are:

- Machine wash warm - 30 degree C
- Do not bleach
- Low tumble dry
- Low iron
- Do not dry clean

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by third party fabric composition report for required quality.

KG Fabriks exceeded a material composition of 98% cellulosic minimum. In particular, the composition for rigid denim was 100% cellulosic, and for stretch denim fabrics it included a maximum of 1.5% elastane. This was verified with third party testing done on the composition of the fabric.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use the Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway. Their ZDHC gateway ID is A341PE54.

KG Fabriks ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this through their ZDHC gateway ID A341PE54.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by reporting wastewater data through the ZDHC Gateway.

KG Fabriks implemented ZDHC Wastewater Guidelines and verified this through the ZDHC Gateway - Gateway ID is A341PE54.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above). KG Fabriks uses less than 15 liters to make a kilogram of denim. This is certified by TUV NORD. KG Fabriks is a certified Green Denim company. They are also National Water Awards Winner for 2018 and 2019.

KG Fabriks implemented ZDHC Wastewater Guidelines and verified this through being a Zero Liquid Discharge and Zero Solid Discharge company certified by TUV NORD. Therefore they are well below the above mentioned threshold, as they recycle and reuse 100% of the processed water.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS) certificate.

KG Fabriks sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) certified organic denims.

d. Include post-consumer recycled content

Aimed to include 5-20% post-consumer recycled content on average (by weight) of the total fabric composition. This will be verified by Global Recycled Standard (GRS) and Recycled Claim Standard (RCS) certificate.

KG Fabriks included 2% post-consumer recycled content (by weight) and verified this through the Recycled Claim Standard (RCS). Based on the requirement from customers, KG Fabriks uses post-consumer recycled content in their denim fabric. It is verified with the Recycled Claim Standard (RCS) Transaction Certificate that they submit to the garment manufacturers with each shipment.

Kipaş Textiles

Headquarters
Kahramanmaras, Turkey

Website
https://kipas.com.tr/

Product launch
N/A

Category

Organisation description

Kipaş Textiles is a vertically integrated manufacturer of fiber, yarn, fabric and denim with over 35 years of experience. By participating in the Ellen MacArthur's Jeans Redesign Project, Kipaş Textiles emphasizes its determination to contribute to a circular economy by transforming the way denim is designed and produced because we care about the planet, its nature, the people and future generations. With an annual production capacity of 80 million meters of fabric, a daily production of 330 tons of yarn and over 5 million garments annually, Kipaş is one of the largest manufacturers and preferred suppliers of the world's leading brands. Sustainable production is in our DNA, and we are committed to make a positive impact in the fashion and textile industry. We believe real change happens through a combination of continuous improvement, innovation and strategic collaboration. Kipaş has invested in long-term partnerships with companies like Lenzing and Unifi for their innovative fibers. Our products meet the highest requirements of standards and independent certification organizations such as GOTS and GRS.

Through our conscious production system with environmentally friendly methods and the latest recycling technologies, we are tackling waste and pollution. In fact, ConservBlue is an eco-friendly dyeing method developed by Kipas that uses 94% less water and 23% less energy sources. The dye lost during the washing process is also recycled and reused. In 2019, the pre-treatment system in our facility was used to recycle 42% of wastewater. Committed to making a positive impact in the fashion industry, 60% of Kipas' production is made with sustainable resources. It is our mission to reduce the amount of industrial waste by a reduce, reuse, and recycle-strategy in order to help build a future-proof fashion industry. "Being part of an industry that has a significant impact on climate change, natural resources and human rights, we have the opportunity to become part of the solution. Kipaş is honoured to participate in the Ellen MacArthur Foundation's Jeans Redesign and contribute to a circular economy. By constantly optimizing our operations, and by seeking innovative solutions and collaborations across the whole value chain, we believe real change happens."

Contact

Halit Gümüşer, Managing Director and Board Member, Kipaş Holding

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

Kipaş Textiles aimed to produce denim fabric (in accordance with the Guidelines) and met this commitment by May 2021. Volumes have been submitted to the Foundation only. Given their experience in sustainable production processes, Kipas Textiles already had products that complied with the Jeans Redesign guidelines before joining the project.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 40 home laundries and retain their ability to meet Kipaş Textiles' minimum test standard for denim fabric, which is:

- Tensile strength test : ASTM D 5034
- Tear strength test: ASTM D 1424
- Shrinkage test : ISO 6330
- Abrasion test : ISO 12947-2

Did not aim to verify this.

Kipaş Textiles exceeded this Jeans Redesign requirement by testing fabric for 40 home laundries and performed four durability tests (Tensile strength test, Tear strength test, Shrinkage test, Abrasion test) to meet their minimum test standard for fabric. They verified this through their appropriate laboratory to carry out these tests.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying
- Instructions to wash with similar colours and inside out
- Instructions to use only coloured detergent
- Instructions NOT to use bleaching detergent
- Instructions NOT to apply dry cleaning
- Instructions NOT to spot clean.

Aimed to verify this by: in-house tests according to Kipaş' standards.

Kipaş Textiles did not include an easily accessible label with the information stated above because Kipaş Textiles provide raw fabrics and is not responsible for garment and home laundry. However, they advised clients to meet the requirements accordingly.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by fibre content analysis test method.

Kipas ensured material composition met a 98% cellulosic minimum and verified this by fibre content analysis test method. Upon request, they can get these tests done from a third party lab. They also have information on blending during yarn preparation.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable. Kipaş Textiles is a fabric manufacturer and is not responsible for garment production but advises clients accordingly.

c. Remove rivets entirely or reduce them to a minimum

Not applicable. Kipaş Textiles is a fabric manufacturer and is not responsible for garment production but advises clients accordingly.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use The Jeans Redesign logo. Kipaş Textiles is a fabric manufacturer and is not responsible for garment production. But would like to use The Jeans Redesign logo on concepts that meet the full criteria.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting. However, Kipaş Textiles will look into this opportunity and might reach out to companies that have the right expertise for this technology, like The Fibersort Project or the partners - collectors and recyclers - that are participating in this Jeans Redesign project.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

Kipaş Textiles ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum.

Kipas Textiles implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. They verified this by publishing wastewater analysis according to the ZDHC guideline two times a year on the ZDHC Gateway.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above).

Kipas Textiles ensured the wastewater volume created for denim fabric was a maximum of 0.025m3/yard. In particular, their fabrics that comply with the Guidelines are dyed with waterless dyeing. They verified this through an LCA report.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable. Kipaş Textiles does not use conventional electroplating, potassium permanganate, stone finishing, or sand blasting as a fabric manufacturer. Kipaş Textiles' chemicals are compliant with REACH and can be verified with EIM (Environmental Impact Measuring) software.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) certifications.

Kipaş Textiles sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) certifications. Both certifications have been used as they produced many products that comply with the Guidelines. Their GOTS certificate registration number is CU1006661GOTS-2021-00050194. Their OCS certificate registration number is CU1006661OCS-2021-00050196.

d. Include post-consumer recycled content

Aimed to include at least 5% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by Global Recycled Standard (GRS) and Recycled Claim Standard (RCS) certifications.

Kipaş Textiles included 5% post-consumer recycled content (by weight) and verified this through Global Recycled Standard (GRS) and Recycled Claim Standard (RCS) certifications. Both certifications have been used as they produced many products that comply with the Guidelines. Their RCS certificate registration number is CU1006661RCS-2021-00050195. Their GRS certificate registration number is CU1006661GRS-2021-00050194.

Maritas Denim

Headquarters
Istanbul, Turkey

Website
http://www.maritasdenim.com/

Product launch
N/A

Category

Organisation description

With name Maritas, we had started our journey in the textile sector by 2002 as an integrated denim fabric supplier in city Kahramanmaras, Turkey. Later, in 2012 we enhanced our production capacity and had our current name, Maritas Denim. Since our foundation we have the ambition to give the best service to our customers by accepting them as business partners and having focus on product quality and variety as well as the ethical production requirements. When you realize the reality that our planet is a barely miracle and how human behaviours have effects on it, you may also deeply realize the importance of the sustainability concept. The more we are aware of the effects of the textile industry on the planet, the more we understand that we must change this effect in a good way. We believe that we must redesign a new path with a promise to serve to Earth and to serve to future. Maritas Denim is determined to act to stop being a burden for the planet, on the contrary to be a resource for it, to make it even more beautiful.

Thereby, we started to analyse all our consumptions such as water, energy, chemicals with the circularity mindset. We accepted science as our main guide and made decisions by reacting to what numbers are telling us. Today we are cooperating with third party companies who measure all our impacts. We mean to proceed with all partners who share and support our sustainability goals. We are continuously updating our sustainable material palette which already includes various alternatives such as organic cotton, cottonized hemp, hemp, linen, recycled cotton, and recycled elastane. After working on it for more than three years, we added the TERRA concept to our collection, which is a fabric dyed with completely natural dyes. In coming years, we aim to enhance the colour palette of TERRA by using the wide colour palette that nature provides to us. The business partners we encountered on the way are proving that we are in the correct direction. Ellen MacArthur Foundation is a partner for us with common goals, therefore we are more than excited to be part of the Jeans Redesign project. Altogether, we will hopefully be leading a more conscious and sophisticated change.

Contact

Abdullah Yaşar Sobacı, Sales & Marketing Manager, Maritas Denim

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

Maritas Denim aimed to produce denim fabric (in accordance with the Guidelines) and met this commitment by May 2021. Volumes have been submitted to the Foundation only. To achieve this, Maritas Denim has cooperated with local consultancy companies such as Ekosistem Engineering Ltd, Mavi Yesil Engineering who have experts in decreasing water, energy consumptions and carbon emissions.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Maritas Denim's minimum test standard for denim fabric, which is:

- Tensile force ASTM-1424
- Tear strength ASTM-5034

Maritas Denim tested fabric for 30 home laundries and performed two durability tests (tensile force and tear strength) to meet their minimum test standard for fabric, verified by SGS or Intertek. They were already producing fabrics which last for at least 30 washes. The fibre quality they are using is at the required level to achieve this.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

Aimed to verify this through care instructions.

Maritas Denim included an easily accessible label with the information stated above, verified by sharing the technical specification sheets with their manufacturers which includes the care instructions of their fabrics.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by fibre content analysis test method or third party test labs.

Maritas Denim ensured material composition met a 98% cellulosic minimum and verified this by ITS, OEKO-TEX test results or certifications they had from Lenzing or other branded cellulose based fibres. The 55% of their production for 2020 has a material composition of 98% cellulosic fibre content as a minimum. They aim to increase this for 2021.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use the Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

Maritas Denim ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this through not using any restricted chemicals listed in the MRSL and following the requirements of ZDHC Gateway.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by reporting wastewater data through the ZDHC Gateway.

Maritas Denim implemented ZDHC Wastewater Guidelines and verified this through following the ZDHC Wastewater Guidelines Version 1.1 and meeting all the requirements indicated in this guideline.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above).

Maritas Denim ensured the wastewater volume created was a maximum of 0.025m3/yard and was treated to specifications a2 (above). For 2020 their wastewater created for denim is 0.022 m3/yard. For 2021 January their wastewater created for denim is 0.018 m3/yard.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS), Organic Content Standard (OCS), Cottonized Hemp, Hemp, Lenzing Tencel, Refibra, Linen, Lenzing Ecovero.

Maritas Denim sourced cellulose-based fibres from organic methods and verified this through sourcing the fibres from Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS) certified farms. They also have the same scope certifications for their production facilities.

d. Include post-consumer recycled content

Aimed to include 5-20% post-consumer recycled content on average (by weight) of the total fabric composition / did not aim to include any post-consumer recycled content on average (by weight) of the total fabric. Aimed to verify this by Global Recycled Standard (GRS) and/or Recycled Claim Standard (RCS).

Maritas Denim included 20% post-consumer recycled content (by weight) and verified this through Global Recycled Standard (GRS) certification.

Naveena Group

Headquarters
Karachi, Pakistan

Website
https://www.naveenagroup.com/

Product launch
N/A

Category

Organisation description

Established in Karachi, Pakistan in 2005, Naveena Denim Mills Karachi is specialized in manufacturing premium yarn and denim fabrics, constantly seeking the ultimate union of form and function by creative engineering. Our purpose is to deliver consistently high quality fabrics relevant to today's and tomorrow's consumers while driving change for the benefit of society and a sustainable future. Building on our heritage, we constantly strive to push the boundaries of the denim industry, aiming for fashionably functional and smart fabrics that break conventional borders and make room for life. With our fully integrated production facilities and more than 850 employees, we produce 18 million meters annually; and with our diverse global network and sales offices in Pakistan, USA, UK, Turkey and Bangladesh, we export to over 40 countries.

We believe that today's and tomorrow's challenges can only be solved with a collaborative, innovative, sustainable model that creates value for everyone on an industry-wide scale. And true innovation is co-created. The Jeans Redesign is a perfect platform to achieve this. We are very much looking forward to expanding our knowledge together, create better and practical solutions, and to promote change in the industry.

Contact

Berke Aydemir, Global Technical Sales Manager, Naveena Denim Mills Karachi

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

Naveena Group aimed to produce denim fabric (in accordance with the Guidelines) and met this commitment by May 2021. Volumes have been submitted to the Foundation only. Naveena Group currently receives queries around this from major brands and they are hoping to produce more fabric according to the guidelines this year.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Naveena Group's minimum test standard for denim fabric, which is:

- Dimensional Changes of Fabrics after Home Laundering AATCC 135
- Ageing of Sulfur-Dyed Textiles: Accelerated AATCC 26 and Standard Test Method for Breaking Strength and Elongation of Textile Fabrics ASTM D 5034
- Physical testing and visual inspection as per ASTM/AATCC standards
- Standard Test Method for Tearing Strength of Fabrics by Falling-Pendulum ASTM D 1424 and Standard Test Method for Tearing Strength of Fabrics by the Tongue ASTM D 2261
- Colour fastness to rubbing ISO 105-X12
- Colour fastness to perspiration ISO 105-E04
- Colour fastness to water ISO 105-E01
- Colour fastness to washing ISO 105-C06
- Colour fastness to water: see AATCC 106
- Colour fastness to phenolic yellow ISO 105-X18
- Colour fastness to accelerated laundering ISO 105 C06
- Colour fastness to crocking (Wet/Dry) ISO 105 X12
- Colour fastness to non-chlorine bleach Gap Inc. S1004
- Fabric Construction (woven) ASTM D 3775
- Fabric Weight ASTM D3776, Fabric Width ASTM D3774
- Yarn Size ASTM D 1059, Dimensional Stability AATCC 135
- Tensile Force ASTM D 5034 and AATCC 26; Seam Slippage ASTM D 434; Torque AATCC 179 Method 2, Option 3
- Stretchability, Recovery and Power of Elastic Fabrics Gap Inc. S1066; Growth and Recovery of Elastic Fabric at 25% Fixed Elongation Gap Inc. S1067
- Stretch and Recovery ASTM D 3107 and Gap Inc. S1064
- Skew Movement Gap Inc. S1048; PH ISO 3071
- Standard Test Method for Permeability of Granular Soils ASTM D 2434; Standard Test Methods for Mass Per Unit Area (Weight) of Fabric ASTM D 3776
- Washing Laundry Appearance ISO 105-C06 as per care label

Naveena Group tested fabric for 30 home laundries and performed 22 durability tests (as stated above) to meet their minimum test standard for fabric.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

Aimed to verify this by accredited third party tests.

Naveena Group did not include an easily accessible label with the information stated above, as this goes beyond the scope of a fabric manufacturer.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by third party fabric composition report for required quality.

Naveena Group ensured material composition met a 98% cellulosic minimum and verified this by third party fabric composition tests.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use the Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway by providing data of our wastewater treatment process on the portal and also, by Oeko-Tex certification and Higg Index, a sustainable coalition portal where we clinch % of 76.46 and ranked top among 9000 SACs submitted including big brands all of these efforts ensuring that our product development procedure constitutes of material unharming to human health and the environment.

Naveena Group ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by reporting wastewater data through the ZDHC Gateway by publishing up to date information regarding their various wastewater treatment processes on the portal along with verified test reports.

Naveena Group implemented the ZDHC Wastewater Guidelines and verified this by reporting wastewater data through the ZDHC Gateway.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above). The produced volume of wastewater is treated under the guideline of 0.025m3/yard according to the specifications of the ZDHC Wastewater Guidelines. The amount of wastewater produced is 0.018m3/yard.

Naveena Group ensured the wastewater volume created was a maximum of 0.025m3/yard and was treated to specifications a2 (above). They confirmed the amount of wastewater they produce for fabric is 0.018m3/yard.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by the certification of Organic Content Standard (OCS) signifying their final product made from purely organic material along with the accreditation of Global Organic Textile Standard (GOTS) which will verify the supply chain process of their product being manufactured mainly from organic materials that are compliant with the environmental regulations. Also, the Transaction Certificates (TC) generated through Control Union will identify the value chain of their product from input to final consumers are certified through defined standards.

Naveena Group sourced cellulose-based fibres from organic methods and verified this through the Organic Content Standard (OCS) and the Global Organic Textile Standard (GOTS).

d. Include post-consumer recycled content

Aimed to include 5-20% post-consumer recycled content on average (by weight) of the total fabric composition / did not aim to include any post-consumer recycled content on average (by weight) of the total fabric. Aimed to verify this by Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS) certificate.

Naveena Group included 5-20% post-consumer recycled content (by weight) and verified this through in-house recycling facility.

Orta Anadolu

Headquarters
Istanbul, Turkey

Website
https://www.ortaanadolu.com/

Product launch
N/A

Category

Organisation description

Since its inception, ORTA has been weaving a denim heritage passed from generation to generation. Founded in 1953, ORTA transformed from a spinning and weaving company to a denim manufacturer in 1985. Today, ORTA operates with its +1000 employees in Turkey. ORTA started its sustainability journey at the beginning of 2000 by using organic cotton and founded its sustainability platform ORTA Blu in 2010 (www.ortablu.org). As an early supporter and adopter of sustainable fibre usage, ORTA has always been on the forefront of sustainable change. At ORTA, We are on a mission to drive the denim industry into a more sustainable future. That's why ORTA Blu is in everything we do, at the intersection of where people, planet, and purpose matter. Today sustainability is 'business as usual' at ORTA and our aim is to create a more robust denim ecosystem where ART(DESIGN) meets TECHNOLOGY meets SUSTAINABILITY meets BIOLOGY for new infinite possibilities of denim today and tomorrow.

And we are committed to create a future where denim is designed, produced, consumed, and disposed of in radically different ways. Our goal is to create immortal products; long lasting good quality fabrics combining circular production with durable construction while efficiently using our resources. We are investing in the next generation sustainability practices that will drive more technological wonders in reaching our goal for endless use and reuse of everything involved in making our denim. We are constantly exploring processes that help us recycle, upcycle, and repurpose everything, moving us towards a denim net-positive future. It is in our DNA to be in a constant search for innovative solutions for a better future of denim, and we aim to be part of the solution in fashion without waste; because a great pair of jeans is an emotional badge, a reminder of good times and we believe that our participation in The Jeans Redesign program will help us in this journey.

Contact

Sebla Onder, Sustainability Specialist, ORTA

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

ORTA aimed to produce denim fabric (in accordance with the Guidelines) and met this commitment by May 2021. Volumes have been submitted to the Foundation only. ORTA created a product list that is compliant with the Jeans Redesign guidelines and updates the list on quarterly basis. The denim fabric produced according to the guideline is obtained by checking the production numbers of the fabrics in this list for the time frame starting from the date ORTA joined the programme (September 2020) until May 2021.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet ORTA's minimum test standard for denim fabric, which is:

- Tear strength test (ASTM D 1424)
- Tensile strength test (ASTM D 5034)

ORTA tested fabric for 30 home laundries and performed two durability tests (tear strength, tensile strength) to meet their minimum test standard for fabric.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying
- No chlorine bleach

ORTA did not include an easily accessible label with the information stated above, as ORTA is a denim fabric manufacturer.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by the mill claim, Global Organic Textile Standard (GOTS), Organic Cotton Standard (OCS) certification, and/or certification from Lenzing for branded fibres.

ORTA ensured material composition met a 98% cellulosic minimum and verified this by the mill claim, GOTS, OCS certification, and/or certification from Lenzing for branded fibres.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use the Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

ORTA ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by reporting wastewater data through the ZDHC Gateway.

ORTA implemented ZDHC Wastewater Guidelines and verified this by reporting wastewater data through the ZDHC Gateway.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above).

ORTA ensured the wastewater volume created was a maximum of 0.025m3/yard and was treated to specifications a2 (above). The produced volume of wastewater is treated to the specifications 2c) of these Guidelines. The water discharge amount was determined as the water discharge from wet processes per meter of fabric production. The value is 0.020 m3/meter.

b. Prohibit the following chemicals or processes:
a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS) for organic cotton qualities and/or Lenzing certification for TENCEL, TENCEL X Refibra, Lenzing Modal, Lenzing Ecovero fibres containing fabrics and mill claims.

ORTA sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS) for organic cotton qualities and/or Lenzing certification for TENCEL, TENCEL X Refibra, Lenzing Modal, Lenzing Ecovero fibres containing fabrics and mill claims.

d. Include post-consumer recycled content

Aimed to include 5-20% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by Global Recycled Standard (GRS) and/or Recycled Claim Standard (RCS) certification.

ORTA included 5-20% post-consumer recycled content (by weight) and verified this by Global Recycled Standard (GRS) and/or Recycled Claim Standard (RCS) certification.

Panther Denim

Headquarters
Hong Kong, Hong Kong

Website
https://www.tatfung-tex.com/

Product launch
N/A

Category

Organisation description

Panther Denim is in the denim value chain and creates innovative fabric production while committing to deep, ongoing sustainability, social and ecological responsibilities to the industry. Our responsibility is to create awareness amongst our customers/consumers about innovative and sustainable products. We are serious about being part of The Jeans Redesign by the Ellen MacArthur Foundation. At Panther Denim we have embraced sustainability as a platform for innovation. We leverage the cooperative works between our design, R&D, procurement, sales and production teams, and suppliers to create more sustainable products for our customers, and to preserve our planet. As a fabric mill; reduction of waste, energy and water conservation, recycling, material health, safe and healthy working environment, are at the core of our sustainability strategy.

We continuously implement recycling programmes in our production facilities; such as heat, wastewater, alkaline, boiler heat, etc. Today, we are in the position to offer ecocentric product ranges; like organic, eco made fiber and bio based and recycled materials, as well as cotton. We communicate our impacts in accordance with our certifications and programs such as ZDHC, CleanChain, Higg Index, GOTS/OCS, GRS, OEKO-TEX STANDARD100, etc. We have always been mindful of the importance of conducting our productions in a responsible manner. We invest in ethical strategies and actions in every stage of our business to transform our industry to a greener future.

Contact

Tim Huesemann, Sales Director, Panther Denim

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

Panther Denim aimed to produce denim fabric (in accordance with the Guidelines) and met this commitment by May 2021. Volumes have been submitted to the Foundation only.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Panther Denim's minimum test standard for denim fabric, which is:

- Tensile Strength Test: ASTM D 5034, ISO 13934, GB/T3923 or other testing methods requested by the customers;
- Tearing Strength Test: ASTM 1424, ISO 13937, GB/T3917 or other testing methods requested by the customers

Aimed to verify this through the mill's inhouse lab or third party labs.

Panther Denim tested fabric for 30 home laundries and performed two durability tests (tensile strength and tearing strength) to meet their minimum test standard for fabric, verified by the mill's inhouse lab.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

Aimed to verify this by the mill's inhouse testing lab or third party labs.

Panther Denim included an easily accessible label with the information stated above, verified by the mill's in-house lab.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by the mill's fabric data sheet based on in-house testing labs or other third party lab tests on fibre content.

Panther Denim ensured material composition met a 98% cellulosic minimum and verified this by the mill's fabric data sheet based on in-house testing labs.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use The Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

Panther Denim ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by reporting wastewater data through the ZDHC Gateway.

Panther Denim implemented ZDHC Wastewater Guidelines and verified this through the ZDHC Gateway.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above).

Panther Denim ensured the wastewater volume created for denim fabric was 0.019m3/yard, and that the produced volume of wastewater is treated to the ZDHC Wastewater Guidelines.

b. Prohibit the following chemicals or processes:
a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS) certifications from Control Union Certifications B.V.

Panther Denim sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) certifications, as well as the transactions records of fibre, yarn, and fabrics, or the TENCEL lyocell certification number.

d. Include post-consumer recycled content

Aimed to include 5% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by Recycled Claim Standard (RCS) Certification from Control Union Certifications B.V.

Panther Denim included 5% post-consumer recycled content (by weight) and verified this through Recycled Claim Standard (RCS) Certification from Control Union Certifications B.V.

Prosperity Textile

Headquarters
Guangzhou, China

Website
https://prosperity-textile.com/

Product launch
N/A

Category

Organisation description

As a large-scale denim fabric manufacturer, Prosperity Textile is committed to promote more sustainable practices in denim, such as using more sustainably-sourced materials, reducing the consumption of water and chemicals in our processes, and designing innovative fabrics which pair well with lower impact jeans laundries. The four areas that Jeans Redesign outlines at its guidelines, durability, material health, recyclability and traceability, are fully in line with our agenda on denim reform, we are excited to be part of this project and will work closely with the Ellen MacArthur Foundation and other stakeholders to make a positive impact in the denim industry.

"Circular economy is not easy work, even more so when there are billions of pairs of jeans made and sold every year. We are happy to participate in Jeans Redesign project to design and produce denim fabrics in accordance with the principles of a circular economy at scale, and we believe through our collaborations we will be able to make denim and jeans more sustainable."

Contact

Andy Zhong, Marketing Director, Prosperity Textile

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

Prosperity Textile aimed to produce denim fabric (in accordance with the Guidelines) and met this commitment by May 2021. Volumes have been submitted to the Foundation only. The most common request from working with their customers was for 99% cotton 1% spandex fabrics, using organic cotton for the cotton part. This was easy to accomplish from a development perspective, but from a bulk order perspective it was more challenging due to the limited availability of organic cotton.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Prosperity Textile's minimum test standard for denim fabric, which is:

- A full set of Fabric Physical Tests including Abrasion resistance, Dimensional stability, Colour fastness, Tensile strength and Tearing Strength

Aimed to verify this by: testing at the mill's inhouse test lab or third party labs based on different market standards such as AATCC, ASTM, ISO and GB/T.

Prosperity Textile tested fabric for 30 home laundries and performed durability tests to meet their minimum test standard for fabric, verified using AATCC135 wash test standard and their internal test standard with ISO, ASTM, AATCC, GB/T.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

Aimed to verify this by sharing information on Prosperity Textile's communication tools like website, presentations, product pages, labels, etc.

Prosperity Textile included an easily accessible label with the information stated above. Normally they worked with their garment manufacturers by advising them how to do the jeans laundries, but in most cases, the wash care information will be suggested to brands by the garment makers.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by the mill's fabric data sheet based on our inhouse test labs or other third party lab tests on fibre content.

Prosperity Textile ensured material composition met a 98% cellulosic minimum and verified by their fabric date sheet including the content of fabrics. They reported this was easy to accomplish, as 98% cellulosic fabrics are very common in denim.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use the Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

Prosperity Textile ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. The ZDHC Wastewater Guidelines are subject to updating by ZDHC. At the time of creation of this document, the latest version is called ZDHC Wastewater Guidelines Version 1.1, published in July 2019. Aimed to verify this by the ZDHC Gateway.

Prosperity Textile implemented ZDHC Wastewater Guidelines and verified the on-site wastewater test result through the ZDHC Gateway. They have extensive wastewater treatment and recycling systems and have been approved under the guidelines via third party testing. Due to their existing infrastructure, this requirement was met easily. They plan to continually improve their systems as well and are confident to be able to meet any future requirements.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above).

Prosperity Textile ensured the wastewater volume created for denim fabric is a maximum of 0.025m3/yard. They have extensive wastewater treatment and recycling systems and have been approved under the guidelines via third party testing. Due to their existing infrastructure, this requirement was met easily. They plan to continually improve their systems as well and are confident to be able to meet any future requirements.

b. Prohibit the following chemicals or processes:
a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic cotton. Aimed to verify this by Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) certifications, the transactions records of fibre/yarn/fabrics, or the TENCEL lyocell certification number.

Prosperity Textile sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) certifications for organic or recycled cotton, and also by the TENCEL lyocell tracking code from LENZING group. Prosperity Textile has a long history of utilizing raw material from these sources. Incorporating them in their product lines is easy to accomplish. The challenge was usually around organic cotton availability and pricing. Brands are under very tough price constraints and the availability and cost of organic cotton (the most common cotton acceptable in the guidelines) made getting Jeans Redesign fabrics adopted for bulk the most challenging component.

d. Include post-consumer recycled content

Aimed to include 5% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by Global Recycled Standard (GRS) and/or Recycled Claim Standard (RCS) certifications.

Prosperity Textile included 5% post-consumer recycled content on average (by weight) of the total fabric composition. Meeting this requirement has been reported to be more challenging. Not from a sourcing perspective, but from a traceability perspective. Post-consumer means it was bought, used, and ultimately recaptured from the consumer in the country it was bought in and due to the nature of it, it lacks transparency and traceability into the source of the original content and the chemicals and practices used to make it. For example, if a yarn spinner in China is recycling post-consumer bed sheets into cotton yarn, the original source of the cotton, the spinning, weaving, and dyeing of the bedsheets is unknown. Additionally, it is also hard to move post-consumer content across borders, so post-consumer content captured in the US or EU is hard to get back to the yarn makers in Asia. So, while they have trusted RCS and GRS certified sources for post-consumer content and it is easy for them to utilize, often brands are hesitant to use them and prefer closed-loop pre-consumer recycled content.

Sapphire Fibres - Neela Blue

Headquarters
Lahore, Pakistan

Website
https://www.neelablue.com/

Product launch
N/A

Category

Organisation description

Neela By Sapphire Fibres LTD is a state of the art LEED (Gold) Certified, sustainable and responsible denim mill, established in June 2016 by Sapphire Fibres Ltd. part of The Sapphire Group. With over 80 years of industry experience formed over three generations, innovation, sustainability and being responsive to our people and environment is deeply ingrained in our roots, values and culture.

The Jeans Redesign project resonates with our value system and hence is a natural partner program to align with. As a responsible citizen of the denim community, we want to provide our customers a product, that meets the ever highest standards and The Jeans Redesign products will certainly help meet that benchmark.

Contact

Shayan Abdullah, Director, Neela by Sapphire Fibres

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

Neela By Sapphire Fibres LTD aimed to produce denim fabric (in accordance with the Guidelines) and met this commitment by May 2021. Volumes have been submitted to the Foundation only. So far Neela By Sapphire Fibres LTD has only designed a capsule collection with fabrics meeting Jeans Redesign criteria. Due to Covid-19, things are slow and hence Neela By Sapphire Fibres LTD are still in a process of materializing any project with customers.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Sapphire Fibres Limited Denim Division's minimum test standard for denim fabric, which is:

- Dimension Stability AATCC 135
- Tensile Strength (kg) ASTM D5034
- Tear Strength (gf) ASTM D1424
- Crocking AATCC 8
- Abrasion resistance ISO 12947-2

Did not aim to verify this by third party verification.

Neela By Sapphire Fibres LTD tested fabric for 30 home laundries and performed one durability test (abrasion resistance) to meet their minimum test standard for fabric. They are verifying this requirement with third party testing. Additionally, their internal labs are Levi's accredited for any global testing.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying
- Wash inside out

Aimed to verify this by third party physical testing company.

Neela By Sapphire Fibres LTD included an easily accessible label with the following information:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying
- Recommended to Use Line Drying

They are verifying this requirement with third party testing. Additionally, their internal labs are Levi accredited for any global testing.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by Sapphire Fibres Limited Denim Division Lab which is accredited from Levi's or any third party lab.

Neela By Sapphire Fibres LTD ensured material composition met a 98% cellulosic minimum and verified this by composition analysis test. They are verifying this requirement with third party testing. Additionally, their internal labs are Levi accredited for any global testing.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use the Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

Neela By Sapphire Fibres LTD ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by the ZDHC Gateway. Aimed to verify this by reporting wastewater data through the ZDHC Gateway.

Neela By Sapphire Fibres LTD implemented ZDHC Wastewater Guidelines and verified this through the ZDHC Gateway.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above).

Neela By Sapphire Fibres LTD ensured the wastewater volume created was a maximum of 0.025m3/yard and was treated to specifications a2 (above). In particular, they reported to be producing a wastewater volume of 0.025m3/yard.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS) Transition Certificates.

Neela By Sapphire Fibres LTD sourced cellulose-based fibres from organic methods and verified this through GOTS Transition Certificate.

d. Include post-consumer recycled content

Aimed to include from 5% to 20% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this through Global Recycled Standard (GRS) and Recycled Claim Standard (RCS) certifications.

Neela By Sapphire Fibres LTD included 5-20% post-consumer recycled content (by weight) and verified this through Global Recycled Standard (GRS) and Recycled Claim Standard (RCS).

Tat Fung

Headquarters
Hong Kong, Hong Kong

Website
https://www.tatfung-tex.com/

Product launch
N/A

Category

Organisation description

Tat Fung is in the denim value chain and creates innovative fabric production while committing to deep, ongoing sustainability, social and ecological responsibility to the industry. Our responsibility is to create awareness among our customers/consumers on innovative and sustainable products. We are serious about being part of The Jeans Redesign by the Ellen MacArthur Foundation. At Tat Fung we have embraced sustainability as a platform for innovation. We leverage the cooperative works between our design, R&D, procurement, sales and production teams, and suppliers to create more sustainable products for our customers and to preserve our planet. As a fabric mill; reduction of waste, energy and water conservation, recycling, material health, safe and healthy working environment are at the core of our sustainability strategy.

We continuously implement recycling programmes in our production facilities; such as heat, wastewater, alkaline, boiler heat, etc. Today, we are in the position to offer an ecocentric product range like organic, eco made fiber and bio based and recycled materials, as well as cotton. We communicate our impact in accordance with our certifications and programs such as Zero Discharge of Hazardous Chemicals (ZDHC), CleanChain, Higg Index, GOTS/OCS, GRS, OEKO-TEX STANDARD100, etc. We have always been mindful of the importance of conducting our productions in a responsible manner. We invest in ethical strategies and actions at every stage of our business to transform our industry towards a greener future.

Contact

Tim Huesemann, Sales Director, Tat Fung

DENIM FABRIC PRODUCED ACCORDING TO THE GUIDELINES

Tat Fung aimed to produce denim fabric (in accordance with the Guidelines) and met this commitment by May 2021. Volumes have been submitted to the Foundation only.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Tat Fung's minimum test standard for denim fabric, which is:

- Tensile Strength Test: ASTM D 5034, ISO 13934, GB/T3923 or other testing methods requested by the customers;
- Tearing Strength Test: ASTM 1424, ISO 13937, GB/T3917 or other testing methods requested by the customers

Aimed to verify this through the mill's inhouse lab or third party labs.

Tat Fung tested fabric for 30 home laundries and performed two durability tests (tensile strength and tearing strength) to meet their minimum test standard for fabric, verified by the mill's inhouse lab.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

Aimed to verify this by the mill's inhouse testing lab or third party labs.

Tat Fung included an easily accessible label with the information stated above, verified by the mill's in-house lab.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum. Aimed to verify this by the mill's fabric data sheet based on in-house testing labs or other third party lab tests on fibre content.

Tat Fung ensured material composition met a 98% cellulosic minimum and verified this by the mill's fabric data sheet based on in-house testing labs.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo on fabric shipped to the garment manufacturer

Did not aim to use the Jeans Redesign logo.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a1. Use chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

Tat Fung ensured denim fabric uses chemicals that comply with Level 1, ZDHC MRSL and verified this through the ZDHC Gateway.

a2. Implement Zero Discharge of Hazardous Chemicals (ZDHC) Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document, as a minimum

Aimed to implement the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of the document as a minimum. Aimed to verify this by reporting wastewater data through the ZDHC Gateway.

Tat Fung implemented ZDHC Wastewater Guidelines and verified this through the ZDHC Gateway.

a3. Ensure the wastewater volume created for denim fabric is a maximum of 0.025 m3/yard

Aimed to ensure the wastewater volume created for denim fabric is a maximum of 0.025m3/yard or below and to ensure volume of wastewater produced is treated to specifications a2 (above).

Tat Fung ensured the wastewater volume created for denim fabric was 0.019m3/yard, and that the produced volume of wastewater is treated to the ZDHC Wastewater Guidelines.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Not applicable.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods and to verify this by Global Organic Textile Standard (GOTS) and/or Organic Content Standard (OCS) certifications from Control Union Certifications B.V.

Tat Fung sourced cellulose-based fibres from organic methods and verified this through Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) certifications, as well as the transactions records of fibre, yarn, and fabrics, or the TENCEL lyocell certification number.

d. Include post-consumer recycled content

Aimed to include 5% post-consumer recycled content on average (by weight) of the total fabric composition. Aimed to verify this by Recycled Claim Standard (RCS) Certification from Control Union Certifications B.V.

Tat Fung included 5% post-consumer recycled content (by weight) and verified this through Recycled Claim Standard (RCS) Certification from Control Union Certifications B.V.

Laundries

Green Lab

Headquarters
Grottammare (AP), Italy

Website
https://greenlabacademy.com/

Product launch
N/A

Category

Organisation description

Green Lab is a laundry based in Italy and a leader in low impact process and sustainable production. Today Green Lab employs about 50 specialized people who have collaborated for 20 years to develop and produce fashion collections that are eco-friendly and apply treatments that aim to drastically reduce environmental impact. Green Lab aligns with the ZDHC guidelines to eliminate the use of toxic and harmful chemicals, made possible by using advanced technologies like Laser treatment, Ozone washing, E-flow application and patented Smart Foam process, combined with advance research with our partners on new chemicals that preserve our health and can substitute the obsolete products generally used in denim production.

We also measure our impact with EIM software and constantly propose new treatments that guarantee minimum consumption of water, use of renewable energy and exclude hazardous chemicals. It is really important for our company to be part of a project like The Jeans Redesign because we are absolutely convinced that only the close collaboration between all the players in the denim industry can lead to tangible results for the protection of our planet. Combining efforts, coordinating processes, and managing energies in the best way, is the right model to follow, and with the Ellen MacArthur Foundation we can make a big contribution to the application of the circular economy in our segment.

Contact

Pasquale Russo Spena, Sustainable Manager, Green Lab

JEANS PRODUCED ACCORDING TO THE GUIDELINES

Green Lab did not meet their commitment and have not produced any jeans (in accordance with the Guidelines) by May 2021.

JEANS ARE USED MORE

a. Ensure jeans are able to withstand a minimum of 30 home laundries

Aimed to produce fabric in accordance with the Guidelines to be able to withstand a minimum of 30 home laundries and retain their ability to meet Green Lab's minimum test standard for denim fabric, which is:

- Appearance: internal method (full garment) / ISO 105-C06
- Tensile force ASTM D 5034-90
- Visual inspection of garments
- Tear strength ISO 13937-1
- Colour fastness to rubbing ISO 105/12
- Colour fastness to perspiration ISO 105–E04
- Colour fastness to water ISO 105-C01
- Stretch and Recovery ASTM D 3107-80
- pH ISO 3071
- Colour fastness to artificial light ISO 105-B02

Aimed to verify this by Green Lab's internal physical test.

No data has been provided related to the achievement of this requirement.

b. Provide visible information on the garment to appropriately care for the jeans

Aimed to produce fabric in accordance with the Guidelines to include an easily accessible label that will include the following information:

- Information on reducing washing frequency
- Instructions to wash at low temperatures (30 degrees or below)
- Instructions to avoid tumble drying

No data has been provided related to the achievement of this requirement.

JEANS ARE MADE TO BE MADE AGAIN

a. Include a minimum of 98% cellulose-based fibres (by weight) in the total textile composition

Aimed to ensure material composition will meet a 98% cellulosic minimum.

No data has been provided related to the achievement of this requirement.

b. Enable easy disassembly of any additional components added to the fabric

Not applicable.

c. Remove rivets entirely or reduce them to a minimum

Not applicable.

d. Use the Jeans Redesign logo

Aimed to use the Jeans Redesign logo printed onto the care label or as an additional woven label stitched into the garment.

No data has been provided related to the achievement of this requirement.

e. Use technology that enables sorting

Did not aim to use technology that enables sorting.

JEANS ARE MADE FROM SAFE AND RECYCLED OR RENEWABLE INPUTS

a. Use chemicals that comply with level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL), as a minimum

Aimed to ensure denim fabric is free of hazardous chemicals and are made with chemicals that comply with Level 1, Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substance List (MRSL) as a minimum. Aimed to verify this through the ZDHC Gateway.

No data has been provided related to the achievement of this requirement.

b. Prohibit the following chemicals or processes:

a. Conventional electroplating **b.** Potassium permanganate **c.** Stone finishing **d.** Sand blasting

Aimed to prohibit the use of conventional electroplating, potassium permanganate, stone finishing, and sand blasting. Aimed to verify this by self-assessments, EIM (Environmental Impact Measuring) software reports and score. Aimed to replace potassium permanganate, stone and sand blasting with alternative chemicals and lower impact technologies.

No data has been provided related to the achievement of this requirement.

c. Source cellulose-based fibres from regenerative, organic or transitional methods

Aimed to source cellulose-based fibres from organic methods.

No data has been provided related to the achievement of this requirement.

d. Include post-consumer recycled content

Did not aim to include post-consumer recycled content.