

THE JEANS REDESIGN

PARTICIPATION REPORT

October 2020



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THE STORY OF JEANS IS THE STORY OF FASHION

When the first blue denim jeans were created almost 150 years ago, they were bought for their strength, durability, and practicality. Jeans became synonymous with work, but soon came to define much more. Every generation has its own fashion style and every country has its trends, but what they so often have in common is jeans. The global jeans market was worth USD 57 billion in 2017.¹

The fades, the rips, the frays, and the tears of our jeans create a bond no other garment can claim. But as we have seen with the rest of the fashion industry, changes to the way we produce and sell jeans are leading to huge problems with waste and pollution.

Over the last 15 years, we have doubled the amount of clothing produced, while the amount of time clothes are worn before they are thrown away has fallen by almost 40%² – and jeans are no exception. After use, less than 1% of clothes are recycled into new.³ The rest of those materials are lost to landfill and incineration, or are used for lower-value applications – such as rags, cleaning cloths, mattress stuffing – representing a loss of material value of more than USD 100 billion every year.⁴

But it does not need to be that way and by coming together we can change this. The Jeans Redesign can become a beacon to the fashion industry and show what is possible when we join forces.

We have the opportunity to shift from the take-make-waste model of today to a circular economy in which business models increase the use of clothes, clothes are made from safe and renewable materials, and old clothes are used to make new ones.

1. See Fashion United, [Global jeans market to grow to 60 billion dollars by 2023](#)
2. Ellen MacArthur Foundation, *A new textiles economy: redesigning fashion's future* (2017), p.18
3. Ellen MacArthur Foundation, *A new textiles economy: redesigning fashion's future* (2017), p.20
4. Ellen MacArthur Foundation, *A new textiles economy: redesigning fashion's future* (2017), p.91



THE JEANS REDESIGN

The Jeans Redesign provides a launch pad to ensure all clothing is made from safe and renewable materials, and all clothing items are used more and made to be made again. Using jeans as a starting point, *Make Fashion Circular* aims to initiate actions that contribute to the reduction of waste and pollution, and support the protection of natural resources by establishing minimum requirements which are set out in the form of Guidelines.

To apply the guidelines to all jeans innovation gaps will need to be closed. It is the ambition of the project to identify them, and focus industry efforts towards addressing them to support the adoption of circular economy principles across all jeans and, ultimately, all clothing.

Make Fashion Circular, launched by the Ellen MacArthur Foundation in 2018 to support the creation of a circular economy for the fashion industry, has initiated this project. They have brought together over 80 experts in jeans production from across academia, brands, retailers, manufacturing, collectors, sorters, and NGOs to define collectively what good looks like for the future of jeans. From this shared vision a set of Guidelines has emerged that establish ambitious steps for jeans manufacturing and production.

Through early adoption, Participants in the project have the opportunity to exceed the minimum requirements set out by the Jeans Redesign Guidelines and, through transparent reporting, Participants can demonstrate themselves as front-runners in one or more of the four Guideline areas.



By starting with jeans, the Jeans Redesign aims to provide a framework for the industry to design clothing for a circular economy. If Participants collectively adopt the Guidelines, at scale, and in all four areas at the same time, there is an important opportunity to collectively raise the ambition level of the fashion industry. The Guidelines will be reviewed regularly and updated by *Make Fashion Circular* with input from the Jeans Redesign Participants, as necessary.

The Jeans Redesign has gathered leading brands and manufacturers and, starting December 2019, fabric mills who support this vision, and are committed to producing jeans – at scale by 2021 – in line with the Guidelines. This leading group will collectively produce around **2,500,000 jeans** that meet the Guidelines by May 2021 at the latest.

A ‘Jeans Redesign logo’ will be provided by *Make Fashion Circular* for display on final products meeting the Guidelines to facilitate sorting after use. Use of the Jeans Redesign logo will be subject to specific terms and conditions, which will be reviewed annually and will be based on Participants meeting the reporting requirement categories.

To receive more information about the Jeans Redesign please contact: jeans@ellenmacarthurfoundation.org



THE JEANS REDESIGN GUIDELINES

First and foremost, the Guidelines stress that it is essential to respect the health, safety, and rights of all people involved in all parts of the fashion industry, and particularly to improve working conditions in manufacturing globally. The Guidelines provide minimum requirements for jeans on durability, material health, recyclability, and traceability.



Participants of the Jeans Redesign are pushing boundaries by adopting the Guidelines across all four areas at the same time. Throughout the Participant Specification pages, text in bold identifies those organisations going even further than the requirements set out in the Guidelines.



DURABILITY



Increasing the average number of times clothes are worn presents a significant opportunity to capture value and design out waste in the clothing industry. Designing and producing clothes that last longer, and offering them via business models that increase their utilisation, would shift the perception of clothing away from being a disposable item to being viewed as a durable product. In addition to implementing design changes, the way clothes are treated during use can significantly increase the amount of times for which they can be used.

Make Fashion Circular conducted research involving multiple brands, manufacturers, and recyclers, which revealed that there are currently no consistently used methods or baseline across the fashion industry for measuring and comparing the durability of garments. Various performance indicators – such as tensile strength, abrasion resistance, and colour fastness – are used at a company level, but there is no common measure. Therefore, the Guidelines below offer a starting point for the industry to move towards alignment on durability. The Guidelines state that:

JEANS SHOULD WITHSTAND A MINIMUM OF 30 HOME LAUNDRIES AND STILL MEET THE ORIGINAL BRAND MINIMUM DURABILITY REQUIREMENTS.

This subsection applies to all organisations (brands, retailers, garment manufacturers, and fabric mills)

GARMENTS SHOULD INCLUDE LABELS WITH CLEAR INFORMATION ON PRODUCT CARE, INCLUDING WASHING FREQUENCY, WASHING TEMPERATURE AND AVOIDING TUMBLE DRYING.

This subsection only applies to brands, retailers, garment manufacturers



MATERIAL HEALTH I/II



Substances of concern that enter the production process often remain in textiles.⁶ This raises concerns due to the adverse effects they can have on people and the environment. Reported impacts range from allergic reactions, respiratory diseases and increased instances of cancer, to the loss of aquatic life.⁷ Some of the chemicals used can persist in the environment and may accumulate over time.⁸

Cotton production uses 2.5% of the world's arable land, but accounts for 16% of all pesticides used;⁹ in India 50% of all pesticides are used for cotton production.¹⁰ Chemicals used in the production of cotton could cause serious damage to the environment and have negative health impacts on farmers, with reported cases of acute poisoning from pesticides.¹¹

During recycling, the presence of hazardous substances has the potential to disrupt the recycling process and lead to the continued circulation of – and therefore exposure to – these substances, depending on the recycling methods used.¹² Rapidly eliminating hazardous substances from textiles production is required to enable healthy flows of materials in a circular system, along with methods to remove those that remain in circulation from existing textiles. According to the Guidelines.

As of December 2019 fabric mills can join the Jeans Redesign therefore additional requirements have been added in this section. These additional requirements are clearly marked on the next page.

5. See A. McLaren, et al., *Clothing longevity perspectives: exploring consumer expectations, consumption and use*

6. Greenpeace, *Dirty laundry: unravelling the corporate connections to toxic water pollution in China* (2011), p.70

7. KEMI, *Chemicals in textiles: risks to human health and the environment* (2014); Greenpeace, *Eleven flagship hazardous chemicals*; Changing Markets Foundation, *Dirty fashion: how pollution in the textiles supply chain is making viscose toxic* (2017)

8. See Greenpeace, *Eleven flagship hazardous chemicals*

9. See Rodale Institute, *Nine ways you may not realise cotton is in your food*

10. D. Maxwell, et al., *State of the apparel sector report: water*, GLASA (2015), p.14; K. R. Dey, et al., *Impact of pesticide use on the health of farmers: a study in Barak valley, Assam* (2013)

11. Nanda Kishore Kannuri and Sushrut Jadhav, *Generating toxic landscapes: impact on well-being of cotton farmers in Telangana, India* (2018), *Anthropology & Medicine*, 25:2, 121–140, DOI: 10.1080/13648470.2017.1317398; Pesticide Action Network, *Is cotton conquering its chemical addiction?*

A review of pesticide use in Global Cotton Production (2017), p.49

12. Based on expert interviews and see EPEA, *Mechanical and chemical recycling of plastics*



MATERIAL HEALTH III/II



CELLULOSE-BASED FIBRES SHOULD BE SOURCED FROM REGENERATIVE FARMING, ORGANIC OR TRANSITIONAL METHODS

This subsection applies to all organisations (brands, retailers, garment manufacturers, and fabric mills)

JEANS ARE MADE WITH CHEMICALS THAT COMPLY WITH ZDHC LEVEL 1 MRSL AS A MINIMUM¹³, AND CONVENTIONAL ELECTROPLATING, STONE FINISHING, POTASSIUM PERMANGANATE (PP), AND SANDBLASTING ARE PROHIBITED.

This subsection applies to all organisations (brands, retailers, garment manufacturers, and fabric mills)¹⁴

THE MILL HAS IMPLEMENTED THE ZDHC WASTEWATER GUIDELINES, INCLUDING TESTING AND REPORTING IN ACCORDANCE WITH THE LATEST VERSION OF THAT DOCUMENT AS A MINIMUM.

This subsection has been added after close exchange with a number of fabric mills. Although the Wastewater Guidelines apply across the textile and footwear industry, at this point in time they are only mandatory for fabric mills

THE WASTEWATER VOLUME CREATED FOR DENIM FABRIC IS A MAXIMUM OF 0.025 m³/YARD OR BELOW

This subsection has been added after close exchange with a number of fabric mills and thus is only mandatory for fabric mills at this point in time

¹³. See Roadmap to Zero, [MRSI conformance guidance](#)

¹⁴. Fabric mills usually do not apply chemicals like PP in their process as this is mainly used in garment finishing. Fabrics provided for Guideline-compliant jeans must be made without the use of PP.



RECYCLABILITY



The way clothes are produced, including the way fabric is made and chosen, rarely considers the recyclability of the materials once they are no longer used. Converging towards an optimised palette of materials – including blends where these are needed for functionality – and developing these alongside highly efficient recycling processes for those materials, is a crucial step in scaling up recycling. This also includes developing new materials where no current ones are suitable to provide both the desired functionality and recyclability.

Based on research for the 2017 Ellen MacArthur Foundation's report *A new textiles economy* and interviews with multiple recycling specialists (over 10 recyclers – both chemical and mechanical), the Guidelines align jeans design and construction with the preferred feedstocks of currently available and commercially adopted mechanical recycling and chemical recycling processes.

JEANS SHOULD BE MADE WITH A MINIMUM OF 98% CELLULOSE-BASED FIBRES (BY WEIGHT IN THE TOTAL TEXTILE COMPOSITION)

This subsection applies to all organisations (brands, retailers, garment manufacturers, and fabric mills)

METAL RIVETS SHOULD BE DESIGNED OUT, OR REDUCED TO A MINIMUM

This subsection only applies to brands, retailers, and garment manufacturers

ANY ADDITIONAL MATERIAL ADDED TO THE JEANS, SHOULD BE EASY TO DISASSEMBLE

This subsection applies to all organisations (brands, retailers, garment manufacturers, and fabric mills)



TRACEABILITY



Recycling technologies rely on accurate detection of materials and sorting to ensure well-defined material streams (either a single material or well-defined combinations of materials, including blends). Therefore, correct labelling and material identification is paramount to accurately sort collected clothing for recycling. Universal tracking and tracing technologies – integrated in the design of clothing and aligned to processes across the value chain – will be needed to support the identification of materials in the system and thereby improve the output quality of the recycling process.

To identify the jeans produced as part of the Project, the Jeans Redesign Logo will be made available to Participants meeting the Logo Terms and Conditions. The Jeans Redesign logo must be as durable as the redesigned jeans themselves, and align with the requirements for total textile composition. It may only be printed on the inside of the garment if it complies with the minimum requirements laid out in the Guidelines.

Should companies start to integrate technology that enables sorting, all technology added to the jeans must not interfere with the recycling process and/or must be easily removable, and be able to withstand washing and wear and tear, while retaining full functionality until the end-of-use.

USE JEANS REDESIGN LOGO

This subsection applies to all organisations (brands, retailers, garment manufacturers, and fabric mills)

[OPTIONAL: USE TECHNOLOGY THAT ENABLES SORTING]

This subsection applies to all organisations (brands, retailers, garment manufacturers, and fabric mills)



THE JEANS REDESIGN

PARTICIPANT SPECIFICATIONS



ELLEN
MACARTHUR
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THE JEANS REDESIGN

PARTICIPANT SPECIFICATIONS

BRANDS



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.

Helping to build a better world is fundamental to AEO's brands, values and purpose. 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 towards 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 our jeans in the most sustainable ways possible, from sourcing more sustainable cotton and other materials to using 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 as a key criteria and provide our customer with great styles more sustainably made.

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





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet AEO's minimum test standard for jeans.

Jeans will be tested using AEO's established quality requirements for appearance, tearing and tensile strength, conducted after 30 washes. Testing will be conducted by a 3rd party company.

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will 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

This will be verified by Care labels with information regarding less washing, using cold water, and hang drying will be included in the final garment.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by the use of the Global Organic Textile Standard (GOTS) or the Organic Content Standard (OCS).

This will be verified through the ZDHC Gateway.

This will be verified by our suppliers, our AEO wash and compliance teams, and third-party inspectors as needed.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

N/A

All trims will be kept to a minimum with these styles, additional materials are not planned to be added.

This will be verified by third-party inspection to confirm garment content.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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.

– **Marisa Ma, Co-Founder**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet ATELIER & REPAIRS' minimum test standard for jeans.

This will be verified by requesting relevant certification by the facilities that will be included in the manufacturing process.

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will 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

This will be verified by the textile supplier on an accessible label



MATERIAL HEALTH

For further details refer to the Guidelines.

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

This will be verified by GOTS, OCS.

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

This will be verified through the ZDHC Gateway.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by requesting relevant certification by the facilities that will be included in the manufacturing process.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

This will be verified by requesting relevant certification by the facilities that will be included in the manufacturing process.

This will be verified by requesting relevant certification by the facilities that will be included in the manufacturing process.

N/A

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



«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.

– **Marie-Emmanuelle Demoures, Responsable de collection, Maison Balzac**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet MAISON BALZAC's minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

This will be verified by:

- Requesting relevant certification by the facilities that will be included in the manufacturing process

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

This will be verified by inhouse inspection processes. Those informations will be clearly added to the care label.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting
- [Optional - Insert additional]

This will be verified by GOTS.

This will be verified through the ZDHC Gateway.

This will be verified by a written declaration by the manufacturer.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

We have removed all rivets from our jeans as of February 2020.

The Jeans will include trims such as woven label, care label and the Organisation confirms it is easy to remove by performing the cutting out.

This will be verified by requesting relevant certification by the facilities that will be included in the manufacturing process. Our blend contains at the maximum 1% of elastane.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

The Jeans Redesign logo will be used.

N/A



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.

– David Gordon, Founder of BAM





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet BAM's minimum test standard for jeans.

This will be verified by

- 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

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.

Jeans produced in accordance with the Guidelines will 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

This will be verified 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.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting

Cotton content: Cotton will be organically grown. This will be verified by 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.

This will be verified through the ZDHC Gateway.

This will be verified through a written declaration from the manufacturer / processor. (We may be able to provide further certification from the processor after the bulk fabric is ordered but this is not confirmed yet.)





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

Removed entirely.

The jeans will include metal zip teeth and button which will be easy to remove by cutting out.

This will be verified by 3rd party fibre analysis testing.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

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

We will be launching the jeans with a take-back scheme making it easy for customers to ensure the product ends up in the correct waste stream.



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 jean to date.

– Nathaniel Freeman, Design Director, Denim, Banana Republic





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet BANANA REPUBLIC's minimum test standard for jeans.

This will be verified by:

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

Jeans produced in accordance with the Guidelines will 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



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting
- [Optional - Insert additional]

This will be verified by use of certified organic fibers (OCS).

This will be verified through the ZDHC Gateway.

This will be verified by use of ZDHC Gateway, Jeanologia, EIM system, and GAP Inc Sandblasting Policy, which bans sandblasting, and Gap Inc Wash Well (low water garment washing).





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

We will be removing all rivets. Only metal hardware is Center Front (CF) Shank.

The Jeans will use one center front metal shank and the Organisation confirms it is easy to remove by performing the following cutting or pulling off.

This will be verified by fiber composition disclosed on Care and Content Label.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

The Jeans Redesign logo will be used.

N/A



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.”

– Rune Gade, Concept and Product Responsible, Vero Moda Denim





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet valid third party test institute minimum test standard for jeans.

The specific test methods will be added by 9 August.

Jeans produced in accordance with the Guidelines will 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

This will be verified by valid third part test institute.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRS�) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. [Optional - Insert additional]

This will be verified by either Organic blend/content standard or GOTS certified fibre from yarn mill or branded fibre from Lenzing.

This will be verified through the ZDHC Gateway.

We will use Jeanologia EIM system to measure the environmental impacts of the specific washes and ensure it is a Low Impact wash We can 2nd party verify this from BESTSELLER internal environmental team or a 3rd party – all sites have an onsite verification. All metal trims will have a 3rd 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).





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum. This will be verified by either Organic blend/content standard or GOTS certified fibre from yarn mill or branded fibre from Lenzing

Jeans will include tbc* % post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. This will be verified by Global Recycled standard and Recycled blend/content Standard.

N/A

N/A

**Cannot be reported at this stage. If PCRC is included this will be reported upon in the project report 2021*



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



Blue of a Kind is honoured to be part of such forward-thinking organisation.

Our company has embedded the values of circular economy and up-cycling in its very founding principles. 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.

– **Fabrizio Consoli, CEO & Founder, Blue of a Kind**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet BLUE MILANO SRL's minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

This will be verified by:

- 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

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

This will be verified by Care Label attached to the front left side of the jeans, right below waistband



MATERIAL HEALTH

For further details refer to the Guidelines.§

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting

This will be verified by use of our relevant production will be manufactured with almost entirely dead-stock and faulty 100% GOTS certified cotton garments.

This will be verified through the ZDHC Gateway.

This will be verified by requesting relevant certification by the facilities that will be included in the manufacturing process.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

Complete absence of metal rivets.

The Jeans will NOT include metal rivets, RFID tags or back-patch, and in general materials other than fabrics. The Organisation confirms it is easy to remove by performing the following: unstitching will be the only process needed to disassembly the garments.

This will be verified by our entire relevant production will be made of rigid fabrics, exclusively made of cotton.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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."

– Jordan Nodarse, Creative Director, Boyish Jeans





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 50+ home laundries (Minimum # is 30) and retain their ability to meet Boyish's minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

This will be verified by tests done by BACL

- 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

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

This will be verified by: This will be included in our BACL test



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRS�) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. No hypochloride, use of neutral based cold water enzymes blue sign certified through Nearchimica

This will be verified by Lenzing certified for Refibra lyocell, GRS certified for recycled content, and OCS certified for organic cotton.

This will be verified through the ZDHC Gateway.

This will be verified by EIM Score, OEKO TEX and GOTS.





RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum.

This will be verified by: Our materials will consist of 100% natural and recyclable fibres—zero petroleum/fossil fuel/oil content.

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

PCRC: N/A

Jeans will include 43 % post-industrial/pre-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by GRS & BAFL.

Metal rivets will be removed entirely or reduced to a minimum.

N/A

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The jeans will include only woven labels and the organisation confirms it is easy to remove by performing the following: trimming select labels off.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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 – Gold level Cradle to Cradle Certified™ 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 Gold level Cradle to Cradle Certified™ garments have built the base for the Jeans Redesign.”

– Charline Ducas, Leader Global Circular Economy, C&A





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet C&A's minimum test standard for jeans.

This will be verified 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

Jeans produced in accordance with the Guidelines will 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

This will be verified by adding this information as part of the product's care instruction



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. [Optional - Insert additional]

This will be verified by Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS) Certification.

This will be verified through the **C2C Certified Product Standard at Gold level.**

This will be verified by **C2C Certified Product Standard at Gold level.**





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

This will be verified by material composition and **C2C Certified Product Standard at Gold level.**

N/A

N/A

The jeans will include metal trims and C&A confirms it is easy to remove by performing the following: cutting out.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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 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 EMF/Jeans redesign project guidelines.

– Mrs Maliha Faisal, President, DL1961 Premium Denim Inc





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet DL1961 Premium Denim Inc's minimum test standard for jeans. This will be verified by SGS / INTERTEK testing on methods:

- 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

Jeans produced in accordance with the Guidelines will 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

This will be verified by the presence of a care label attached to the garment. Instructions will remain visible after 30 home laundries.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting
- [Optional - Insert additional]

This will be verified by [This will be verified by GOTS/OCS Transition Certificate for Organic Cotton products; or GRS for recycled cotton.

Our company is registered on ZDHC Gateway and we abide by the products listed on MRSL. Therefore, this will be verified through the ZDHC Gateway.

This will be verified by Impact scoring softwares such as EIM from Jeanologia.





RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum. This will be verified by content analysis testing method through SGS / INTERTEK.

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include 5% & 20% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. This will be verified by Global Recycled Standard (GRS) & Recycle Claim Standard (RCS).

Metal rivets will be removed entirely or reduced to a minimum.

N/A

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The Jeans will include metal trims and the Organisation confirms it is easy to remove by performing the following cutting out.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

We are exploring fiber tracing technologies for traceability.



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!

– **Guy Cohen Solal, CEO, Fairblue Jeans**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 35 home laundries and retain their ability to meet Fairblue Jeans' minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

This will be verified by

- LAB TEST inside SGS / INTERTEK
- 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

- 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

This will be verified by SGS / INTERTEK



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by using only GOTS Cotton for jeans and pockets.

This will be verified through ITACLAB, who conforms with the ZDHC MRSL Level 1.

This will be verified by ITACLAB.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

Rivets will be removed entirely.

The jeans will not include any material or technology and the Organisation confirms it is easy to remove.

This will be verified by LAB TEST inside SGS or INTERTEK.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of 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 / trusted third party data (certifying bodies, control offices, auditors, NGOs, associations, etc.), the ViJi system enables federating all the players in the textile / 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



FRAME is a brand that bridges the heritage and quality of manufacturing in Los Angeles with a distinctly European aesthetic. Its collections take inspiration from a French way of "dressed up casual" embodied by the style icons of the 1970s.

Since the brand's inception in 2012, FRAME has rapidly evolved from the o-duty models favourite denim brand, to a fashion house that produces four ready-to-wear collections a year.

With headquarters split between Culver City, Los Angeles and Fitzrovia, London, FRAME is known for its coveted wardrobe classics, American craftsmanship and its loyal following.

We have been in the industry for quite some time and we feel it is important for us to have social impact with our clothes, especially during these times we all going through, the Jeans Redesign with the association of EMF & BDA felt the right fit for our company.

– **Michael Mechaly, VP of production, FRAME**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet Ellen MacArthur's minimum test standard for jeans.

This will be verified by:

- BDA own test
- Intertek – testing 3rd party

Jeans produced in accordance with the Guidelines will 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
- All wash instruction will be on Care label

This will be verified by FITI testing company.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting

This will be verified by Intertek.

This will be verified through the ZDHC gateway.

This will be verified by Intertek.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include 10% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

We usually have 2 rivets in our jeans but we can put bartack instead if necessary.

N/A

This will be verified by intertek.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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.”

– **Melisa Alessi, Director, Sustainability and Product Development, Frank and Oak**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will 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.

This will be verified by:

- In house testing for minimum laundering requirements with visual inspection of garment
- Accredited QA 3rd party test labs will conduct the following tests: Crocking; Abrasion resistance; Tensile strength, tearing strength and seam slippage; Pocket strength.

Jeans produced in accordance with the Guidelines will 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) – currently on care labels
- Instructions to avoid tumble drying – line dry is currently indicated on care labels

This will be verified by an internal approval process and indication on care label instructions and website product pages



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting

This will be verified by accredited certifications such as GOTS or OCS for organic cotton.

We currently prioritise recycled cotton and also use organic cotton, linen and hemp, and Lenzing fibres (Tencel Lyocell, Tencel Modal) in our compositions.

This will be verified through the ZDHC gateway.

This will be verified by a declaration from manufacturer including development of product under hydro-less and laser processes and sharing of wash recipes. This can also include Jeanologia EIM system verification.





RECYCLABILITY

For further details refer to the Guidelines.

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

This will be verified by fibre composition analysis reports.

Optional: include 10% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by GRC, confirmation from fabric mill and/or garment manufacturer, for specific styles using post consumer waste fibres.

Metal rivets will be removed entirely or reduced to a minimum.

We have removed all rivets on our denim as of January 2020.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The Jeans will include shanks and zippers that can be easily removed by performing mechanical cutting. We aim to continue research on this point as this aspect of circularity is important and dictates our design – the commitment to remove rivets was as an effort to remove a barrier for easy recycling– we hope to innovate in solving the other pain points.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

We are looking for a viable solution/technology to share end of life solutions on our products.



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 EMF Jeans Redesign, 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."

– Michele Sizemore, SVP of Production, GAP





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet GAP's minimum test standard for jeans.

This will be verified by:

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

Jeans produced in accordance with the Guidelines will 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

This will be verified by Presence of care label on the product



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting

This will be verified by use of certified organic fibres (Global Organic Textile Standard (GOTS) Organic Content Standard (OCS)).

This will be verified through the ZDHC Gateway.

This will be verified by the use of the ZDHC Gateway, Jeanologia EIM system and GAP Inc. Sand Blasting Policy, which bans sandblasting.





RECYCLABILITY

For further details refer to the Guidelines.

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

This will be verified by fibre composition disclosed on Care and Content label.

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include **5% post-consumer recycled content (PCRC)** on average (by weight) of the total fabric composition. This will be verified by use of certified recycled fibres (Global Recycled Standard (GRS) or Recycled Claim Standard (RCS)).

Metal rivets will be removed entirely or reduced to a minimum.

N/A

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The Jeans will include trims and the Organisation confirms it is easy to remove by pre-processing for recycling.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



GUESS is proud to join the Ellen MacArthur Foundation, its Jean Redesign programme and the *Make Fashion Circular* initiative.

To develop the initial Jeans Redesign concept, GUESS is partnering 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.





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet GUESS's minimum test standard for jeans.

This will be verified by:

GUESS is capable of either conducting the wash testing in-house or contract a 3rd party lab to conducting these tests for us. GUESS works with several 3rd party labs including BV, UL, SGS and Fiti. The vendor we choose for the testing will depend on availability and pricing. Tests that may be conducted include Abrasion Resistance, After-wash Appearance, and Colour Fastness.

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will include an easily accessible label showing the following information: Care Instruction Labels are created in-house by GUESS. GUESS may contract a 3rd party lab to verify information on labels.

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

This will be verified by a 3rd party lab.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

This will be verified by requesting applicable certifications such as OCS certificates for organic fabrics.

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

This will be verified through the ZDHC Gateway.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by a 3rd party lab.





RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum.

This will be verified by a 3rd party lab.

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans may include up to 30% pre- or post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by a 3rd party lab.

Metal rivets will be removed entirely or reduced to a minimum.

N/A

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The Jeans may include screw back tack buttons or double shank tack buttons and the Organisation confirms these are easy to remove by performing the following: unscrewing the screw back tack buttons or popping out the double shank tack buttons.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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.”

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





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet H&M's minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

This will be verified by:

- 30 degree Celsius temperature and line dry method to reach 30HL
- We performed three tests to secure the durability here after 30HL:
 1. Tensile Strength (ISO13934-2)
 2. Tearing (ISO13937-2)
 3. Dimensional stability (ISO6330) modified based on customers washing method

- 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

This will be verified by our durability tests mentioned and are based on customers following the care instructions.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by GOTS (Global Organic Textile Standard and OCS (Organic Cotton Standard).

This will be verified through the ZDHC Gateway.

This will be verified by

- a) Conventional Electroplating: for this project we are only using metal trims in their natural raw metal colour (weekday = stainless steel, H&M = aluminium). That means, no plating (neither eco or conventional, or oxidation) is used.
- b) Potassium Permanganate: We can show the wash recipe of what we are using.
- c) Stone finish: We can show the wash recipe of what we are using.
- d) Sand blasting: H&M is since 2012 only allowing production in factories that are entirely sandblasting-free.





RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum. This will be verified by Content analysis testing method: Deviation of fibre content ISO1833.

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include tbc % post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by *GRS (Global Recycled Standard)* and *RCS (Recycle Claim Standard)*.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The Jeans will include [metal trims] and the Organisation confirms it is easy to remove by performing the following: I:CO & Re:newcell will follow their existing technology to remove and collect metal trims for recycling. We also collaborate with YKK to develop as durable metal trims (rivets and buttons) in decreased metal weight/consumption and minimize use of mixed metal types and plating to increase recyclability.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



Radically different denim that does not only make your ass look fabulous but that is also designed and made according to circular economy principles.

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.

“Denim jeans are an obvious starting point to make a positive change, given the huge impact with regards to the resource intensive raw materials, the intensive chemical processes generally used for dyeing and finishing denim and the throw-away nature of today’s consumer culture.”

– Tom Duhoux, Founder, HNST





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet HNST Jeans' minimum test standard for jeans. This will be verified by quality tests done by independent test and research centre:

- 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

Jeans produced in accordance with the Guidelines will 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 use the specially developed pro-biotic spray to avoid washing

This will be verified by being part of legally required label.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

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

This will be verified by Global Organic Textile Standard (GOTS).

Additionally, recycled fibres are tested in independent laboratories. When limit values of OEKO-TEX 100 Class II are not met, the batch of recycled content will not be used for jeans. This will be verified through the ZDHC Gateway, independent lab analytics, certifications such as OEKO-TEX 100.

This will be verified by production guidelines in code of conduct, assessment of processes and provided MSDS of our production partners, independent lab analytics, certifications such as OEKO-TEX 100 and self-assessment Jeanologia EIM reports & scores.





RECYCLABILITY

For further details refer to the Guidelines.

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

This will be verified 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.

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include 21% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. This will be verified by Textile Exchange Global Recycled Standard (GRS).

Metal rivets will be removed entirely or reduced to a minimum.

Jeans are designed rivet-free.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The Jeans will include removable and replaceable buttons and the Organisation confirms it is easy to remove by performing the following: unscrewing the button.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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 an “eco-luxury” 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 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 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.

– Isabelle Capron, International VP, ICICLE





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet ICICLE's minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

This will be verified by:

- 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

- 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

This will be verified by visual inspection of the care label on the product.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. [Optional - Insert additional]

This will be verified by using GOTS certified fabrics supplied by Candiani S.p.A.

This will be verified through the ZDHC Gateway.

This will be verified by written declarations signed by ICICLE's own factories and jeans product manufacturers.



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FOUNDATION



RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

N/A

The Jeans will include recycled paper labels and the Organisation confirms it is easy to remove by cutting the paper label off using scissors.

This will be certified by the information of fabric composition on the care label of the jeans products. The fabric will contain the 98% of cotton, which will be shown clearly on the care label.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

The Jeans Redesign logo will be used.

N/A

However, ICICLE would like to explore the possibility to work with suppliers of such technology that enables sorting.





LEE

Backed by 130 years of purposeful design and craftsmanship, Lee's® versatile styling and superior fit continue to inspire generations.

Lee® has empowered the working world towards a brighter future since 1889, when H.D. Lee cast a vision to redefine quality in product. Weaving purpose into everything we do, sustainability is at the forefront of every decision Lee makes.

We innovate at every step of the denim supply chain, minimising water and energy consumption in sourcing, dyeing, and manufacturing, but that's not the whole story. Like our founder did 130 years ago, Lee is envisioning a new future for our industry, we're making our clothes last even longer and ensuring they have a second, third, and even fourth life. Lee isn't selling clothing and walking away, we want to be there when your clothing is ready to be put to another use.

For the Jeans Redesign, we're focusing our initial efforts to bring a fully compostable jean to our consumers. We plan to launch a small collection by May 2020.

“Like people across the world, at Lee, we know the urgency of the climate crisis. As a global, heritage denim brand, we feel the responsibility. It's an honor to partner with the Ellen MacArthur Foundation to transform our industry and create a dynamic, sustainable future.”

– Roian Atwood, Director of Sustainability, Lee ®





LEE



DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet Lee's minimum test standard for jeans.

This will be verified by:

Jeans produced in accordance with the Guidelines will 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

This will be verified by Kontoor Brands Global Sustainable Business, Innovation and Design Teams.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRS�) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by

This will be verified through the ZDHC Gateway.

This will be verified by the manufacturer, Kontoor Brands Compliance and Sourcing teams, third party auditors.





LEEF



RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

This will be verified by the mill, Kontoor Brands Global Sustainable Business team, third party auditors.

N/A

N/A

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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.”

– Eva Engelen, CSR Manager, MUD Jeans





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet MUD Jeans' minimum test standard for jeans.

This will be verified by:

- 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

Jeans produced in accordance with the Guidelines will 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

This will be verified by sharing this information on the garment label, on the wash consciously page and on all product pages from the MUD Jeans website.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by Global Organic Textile Standard (GOTS) certified.

This will be verified through the ZDHC Gateway.

This will be verified by mutual agreement with the suppliers and is partly assed by the Nordic Swan Ecolabel.





RECYCLABILITY

For further details refer to the Guidelines.

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

This will be verified 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).

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include 23% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. This will be verified by fibre composition and Global Recycled Standard (GRS).

Metal rivets will be removed entirely or reduced to a minimum.

N/A

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

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.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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.

– Rune Gade, Denim Leader & Sustainability Pioneer, nu-in





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet nu-in's minimum test standard for jeans. This will be verified by INTERTEK:

- 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)

Jeans produced in accordance with the Guidelines will 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:

- 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.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting

This will be verified by:
GOTS (Global Organic Textile Standard)
OCS (Organic Blended Content Standard)
RCS (Recycled Cotton Standard)
GRS (Global Recycle Standard)

This will be verified through the ZDHC Gateway.

This will be verified by: CHANTUQUE using JEANOLOGIA'S EIM software to measure the impact of each garment. All nu-in jeans have a "LOW IMPACT" score.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

All nu-in jeans will have bar tacks instead of metal rivets

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. The Organisation confirms it is easy to remove.

This will be verified by INTERTEK:
Fiber Identification: EU Directive 1007/2011- Microscopic Identification & Mech. Sep. & Method 7.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

At the moment we are not ready with this but we are looking into implementing a "CircularId" or "RFID" on each garment for consumers to engage with the product and ultimately make it easier to recycle.



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 — this fall we will launch our denim collection made with certified sustainable fibers and minimal finishing. Our denim will also be 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.

– **Christoffer Immanuel, Co-CEO and Founder, Organic Basics**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet Organic Basics's minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

This will be verified by:

- Manufacturer will conduct wash tests and durability testing / abrasion resistance

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

The care instructions will clearly communicate the above information.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting
- [Optional - Insert additional]

The jeans will be GOTS certified.

This will be verified through the ZDHC Gateway.

Manufacturer will verify the above.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

Jeans will include 10% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

The Jeans will include Zamak shank buttons and the Organisation confirms it is easy to remove by unscrewing the screws attaching the shanks.

N/A

Manufacturer will verify the above

Mill will verify the above.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

The Jeans Redesign logo will be used.

N/A



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."

– Megan Stoneburner Azim, Director of Sourcing & Sustainability, OUTERKNOWN





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet Outerknown's minimum test standard for jeans.

This will be verified by: SGS 3rd party testing

- ASTM D5034 Tensile Strength
- ASTM D1424 Tear Strength
- ASTM D1683 Seam Strength and Seam Slippage

Jeans produced in accordance with the Guidelines will 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

This will be verified by including instructions on the garment.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by the Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS) certification.

This will be verified through the ZDHC Gateway.

This will be verified by Jeanologia EIM reports.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

This will be verified by the Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS) certification.

N/A

N/A

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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.





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet Outland Denim's minimum test standard for jeans.

This will be verified by:

- 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

Jeans produced in accordance with the Guidelines will include an easily accessible label showing the following information:

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

This will be verified by washing instructions including all the above on the care label inside the jean.





MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. Hypochlorite - eliminated by using ozone
- f. Strong alkali chemicals like Metabisulfite - eliminated neutralization processes by use of sustainable chemicals
- g. Acidic and alkali chemical liquor - Ensure to nōtr condition during chemical processes by utilising alternative techniques
- h. High Liquor Ratio rate - Ensure to use low liquor ratio by using different methods
- i. Hand sanding - eliminated hand sanding by use of laser techniques
- j. Manual production techniques - eliminated manual denim processes by use of automation systems like laser, 3d machine, E-flow

This will be verified by the Global Organic Textile Standard (GOTS).

This will be verified through the ZDHC Gateway.

This will be verified by 3rd party assessment.





RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum.

This will be verified by Bossa Denim and the GOTS certification they hold for the organic cotton used in Outland Denim orders.

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include up to 20% pre-consumer/post industrial recycled content on average by weight of the total fabric composition.

This will be verified by denim certification from Control Union - Global Recycled Standard and Recycled Claim Standard Blended

Metal rivets will be removed entirely or reduced to a minimum.

N/A

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The Jeans will include buttons, minimal rivets and zippers and the Organisation confirms it is easy to remove by performing the following: cutting around the edges of the hardware.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



Created in 2009 by Yael Aflalo, Reformation is a revolutionary lifestyle brand that proves fast fashion and sustainability can coexist. Reformation combines stylish, vintage-inspired designs with sustainable practices, releasing limited-edition collections for women who want to look beautiful and live sustainably. A 100% carbon, water and waste neutral company, Reformation infuses green measures into every aspect of the business. From running a sustainable factory in Los Angeles to using deadstock and eco fabrics to tracking the environmental impact of every product, Reformation is committed to pushing the industry forward. The brand has also established itself as a pioneer in retail innovation, developing an in-store tech concept that brings the best of its online experience to its 14 physical doors.

“The way most denim is currently produced is harmful to the environment. The conventional cotton farming process alone uses significant water and pesticides, and seriously toxic chemicals are often used to dye and finish denim. Our mission at Reformation is to lead and inspire a sustainable way to be fashionable – we also really love wearing denim, so tackling sustainable denim was a no-brainer for us. We’re thrilled to participate in the Make Fashion Circular Jeans Redesign so we can collaboratively address the most pressing needs in the denim industry and move towards a circular system.”

– Yael Aflalo, Founder and CEO, Reformation





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet LYMI Inc's minimum test standard for jeans.

This will be verified by physical tests including

- 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.

Jeans produced in accordance with the Guidelines will 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

This will be verified by physical testing with an in house and/or third-party testing firm.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by supply chain mapping/ traceability requirements and Global Organic Textile Standard (GOTS) or Organic Cotton Standard (OCS) scope certifications and Transaction Certificates (TCs).

This will be verified the ZDHC Gateway.

This will be verified by confirmation of an approved chemical formulations and processes list used by our jean manufacturers. All denim manufacturers must sign our Sustainable Partners Guidebook which outlines requirements for our RSL (AFIRM 2019) and our approved processes/finishes. Additionally, certifications like Oeko-tex, Bluesign will verify safe chemistry as well as self- assessment verification tools like ChemSec and Jeanologia.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

This will be verified by fibre composition confirmation of materials, zipper tape, thread, interlinings and labels used.

N/A

N/A

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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 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.

- Haya Iqbal Ahmed, Founder, **seventy + mochi**
- Kirsty McClean, Brand Strategist, **seventy + mochi**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines, will 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.

This will be verified by:

- 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

Furthermore, we are Oeko Tex 100 Class I product certified.

Jeans produced in accordance with the Guidelines will 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

This will be verified by 3rd party physical testing lab.





MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. [Optional - Insert additional]

This will be verified by Global Organic Textile Standard (GOTS) / Organic Content Standard (OCS) and also Transaction Certificate is issued after every shipment / transaction by the certification body (Control Union) which is also known source to verify the claim of the contents.

This will be verified through the ZDHC Gateway and IPE platform and Cradle to Cradle 1 product 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.

This will be verified by

- Cradle to Cradle (C2C) certified product standard at Gold level.
- We will use laser instead of chemical.
- This will be verified by clean chain portal-ZDHC gateway portal.

We are developing new methods for jeans on the market by May 2021. We are exploring rags and resin balls.





RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum.

This will be verified through individual fabric compositions certificates and we can share these upon request.

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include minimum 5% Pre-consumer Waste (White Cotton) under Recycled Claim Standard (RCS), Artistic Fabric Mills is first cradle to cradle certified company making products with Pre-consumer Waste (white cotton), also we are certified with Global Recycled Standard (GRS) post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. This will be verified by Recycled Claim Standard (RCS) – Control Union certification body.

Metal rivets will be removed entirely or reduced to a minimum.

Rivets reduced to a minimum: between 0 - 4

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The Jeans will include minimal rivets, sustainable buttons and poppers where possibly to enable easy disassembly and the Organisation 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.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

We will use the logo on our products.

Optional: use of technology that enables sorting.

Artistic Fabric Mills is first company who had installed recycling plants PIW - Post Industrial Waste & PCW - Post Consumer Waste in Pakistan. We have our own approved sorting centre certified under certifications; Recycled Claim Standard (RCS) and Global Recycled Standard (GRS) by Control Union certification body.



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.

Signing up to the Jeans Redesign Guidelines is just one of several ways we at Tommy Hilfiger are 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, and we recently launched our 100% pre-consumer recycled cotton denim styles. 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.

“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 Jeans Redesign alongside other brands that are committed to the circular transformation of our industry.”

– Martijn Hagman, CFO, Tommy Hilfiger Global and COO, Tommy Hilfiger Global & PVH Europe





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet Tommy Hilfiger's minimum test standard for jeans.

This will be verified by:

- Accredited QA 3rd party test labs will conduct the below tests as per Guideline requirements.
- 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

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

Care label included with instructions to:

- Reduce washing frequency
- Cold wash – wash at 30 degrees or less
- Avoid tumble-drying.

This will be verified by testing by accredited QA 3rd party test labs conducted for appearance after cold wash



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by organic cotton certification (e.g. OE) for all cellulose-based fibre components of the garment

This will be verified through the ZDHC Gateway.

This will be verified by accredited QA 3rd party verified EIM reports as per internal PVH Europe / Tommy Hilfiger Global 'Lower Impact Denim' (LID) programme processes.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include 0% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Weight of all components of denim garment will be verified by accredited QA 3rd party test labs.

N/A

N/A

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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 awarenesses 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.

– Adam Taubenfligel, Creative Director, Triarchy





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet Triarchy's minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

This will be verified by:

- Appearance: CA-TM 02
- Dimensional stability ISO 6330
- Tensile force ISO 139342
- Seam force ISO 13935-2
- Abrasion ISO 12947-2

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

This will be verified by visual inspection of the garments.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. [Optional - Insert additional]

This will be verified by GOTS.

This will be verified through the ZDHC Gateway.

This will be verified by the manufacturer/process audit.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

Metal rivets will be replaced with bar tacks.

The Jeans will include trims and the Organisation confirms it is easy to remove by performing the following: cutting out.

This will be verified by GOTS certification and by fabric composition on Care and Content label.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

The Jeans Redesign logo will be used.

N/A



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.

– Walden Lam, Co-founder, unspun





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet unspun's minimum test standard for jeans.

This will be verified by collecting wearlogs from our customers and requesting relevant tests/certifications to our suppliers involved in the fabric production.

The following laboratory certified tests provided by our partner mill:

- ASTM D 5034 Tensile Strength
- ASTM D 1424 Tear Strength
- ASTM D 3882-99 Skew Movement
- ASTM D 3107-75 Stretch Growth
- Shrinkage Test

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will 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

This will be verified by indication on Care Label printed on the jeans' pocket and website product pages.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. [Optional - Insert additional]

This will be verified by supply chain mapping /traceability requirements and GOTS certification, and whenever possible using fibres from Lenzing.

This will be verified through the ZDHC Gateway.

This will be verified for a) and b) by mutual agreement and confirmation of an approved chemical formulations and processes list used by our manufacturers and for c) and d) by not undergoing any finishing, which is the case for all our jeans.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

We have removed all metal rivets.

The Jeans will include a dissolvable thread and removable buttons and the Organisation confirms it is easy to remove by performing the following melting the thread and unscrewing the buttons.

This will be verified by the fabric fact sheet provided by the mill and by fibre composition disclosed on Care and Content label.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

The Jeans Redesign logo will be used.

N/A



Wrangler has been an icon in authentic American style around the world for more than 70 years. With a rich legacy rooted in the American west, Wrangler commits to offering unmatched quality and timeless design. Its collections for men, women and children look and feel great, inspiring those who wear them to be strong and ready for life, every day. For more information, visit Wrangler.com.

Wrangler is committed to advancing regenerative practices in the cotton supply chain and support farmers who do the same. The Jeans Redesign is a great opportunity to share our work on regenerative agriculture with other brands and to learn from them how they are moving towards more circular models. We're proud to join this group of industry leaders and be a part of an industry-wide shift towards more purposeful design and manufacturing.

– **Roian Atwood, Senior Director of Sustainability, Wrangler**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet ASTM's minimum test standard for jeans.

This will be verified by:

- 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

Jeans produced in accordance with the Guidelines will 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

This will be verified by the accredited lab in the Quality Assurance department at Kontoor Brands.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting
- [Optional - Insert additional]

This will be verified by the Field to Market Fieldprint Calculator.

This will be verified through the ZDHC Gateway

This will be verified by the mill, Kontoor Brands Global Sustainable Business team, third party auditors where necessary.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

N/A

N/A

This will be verified under the bill of lading, as material content is a taxable item, and content claims are regulated.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

The Jeans Redesign logo will be used.

N/A



THE JEANS REDESIGN

PARTICIPANT SPECIFICATIONS

GARMENT MANUFACTURERS & FABRIC MILLS



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 Jeans Redesign Project, to find creative solutions that are sensitive and efficient.

- Hasan Javed, Executive Director, AGI Denim
- Aisha Javed, Executive Director, AGI Denim





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet Artistic Fabric & Garment Industries (Pvt.) Ltd.(AGI DENIM) minimum test standard for jeans.

This will be verified by:

- 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

This will be verified by 3rd party physical testing.

Jeans produced in accordance with the Guidelines will 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





MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by Organic Content Standard or Global Organic Textile Standard (GOTS)

Our company is registered on ZDHC Gateway and we abide by the products listed on MRSL. Therefore, this will be verified through the ZDHC Gateway.

This will be verified by [Artistic Fabric & Garment Industries (Pvt.) Ltd.(AGI DENIM) which will use:

- Laser technologies (Jeanologia)
- Ozone
- Various alternative chemicals to replace PP
- Eco-stones
- EIM scoring
- Sand blasting is not used since 2009 at our Company.





RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum.

This will be verified by GOTS / OCS Certification.

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include 5% and 20% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by GRS and RCS.

Metal rivets will be removed entirely or reduced to a minimum.

We will either remove all rivets or use recyclable ones. The only metal hardware will be Centre Front Shank.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The Jeans will use one centre front metal shank and the Organisation confirms it is easy to remove by cutting or pulling off.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Jeans Redesign logo will be used.

Optional: use of technology that enables sorting.

N/A



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 circular economy and our vertical set up resonate with Jeans redesign project guidelines.

– Mr. Faisal Ahmed, CEO, ADM – Artistic Denim Mills Ltd





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet ADM – Artistic Denim Mills Ltd's minimum test standard for jeans.

This will be verified by SGS / INTERTEK testing on methods:

- 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

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will 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

This will be verified by the presence of a care label attached to the garment. Instructions will remain visible after 30 home laundries.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by [This will be verified by GOTS/OCS Transition Certificate for Organic Cotton products; or GRS for recycled cotton.

Our company is registered on ZDHC Gateway and we abide by the products listed on MRSL. Therefore, this will be verified through the ZDHC Gateway.

This will be verified by Impact scoring softwares such as EIM from Jeanologia.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

This will be verified by Content analysis testing method through SGS / INTERTEK.

Jeans will include 5% and 20% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by Global Recycled Standard (GRS) and Recycle Claim Standard (RCS).

N/A

The Jeans will include metal trims and the Organisation confirms it is easy to remove by performing the following cutting out.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

We are exploring fiber tracing technologies for traceability.



Artistic Milliners is a vertical denim manufacturing company based out of Pakistan. Centred on our core values of quality, service, innovation and sustainability, we are the preferred choice of leading denim brands of the world. Our interest in joining Ellen MacArthur Jeans Redesign project is aligned with the blueprint of the company based on circularity and transparency.

Artistic Milliners has strong focus on Climate Positive Action. We believe circularity is not limited to the product itself- but also includes the resources that goes into making denim. We recycle 85% of water in all our mills and laundries; have Wind Energy Plants that offsets more than 50% of GHG emissions then what is required to make us carbon neutral. We are also working to digitize supply chain of cotton to bring visibility to our farmers and make our denim more sustainable.

“As manufactures of the World’s first Cradle to Cradle Gold Certified Denim; and the first in Pakistan to launch PCW Denim programme - we speak from experience when we say there is no other nexus to combine fast fashion and sustainability other than circular economy.”

– Omer Ahmed, Managing Director, Denim Division, Artistic Milliners

“Ellen MacArthur initiative to include both garment manufacturers and denim mills in the Jeans Redesign project is a step in the right direction. Artistic Milliners is uniquely placed to collaborate with EMF on both fronts- mill side and garment side- and hence comprehensively curate a truly circular Jeans right from the farms to the factories.”

– Murtaza Ahmed, Managing Director, Garments Division, Artistic Milliners





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet Artistic Milliners' minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

AM has in-house facility for testing for home laundry washes.

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

- 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)

This will be verified by third party who'll check care labels of garments.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.

The wastewater volume created for denim fabric is a maximum of 0.025 m³/yard or below

This will be verified by GOTS/OCS Transition Certificate for Organic Cotton products; or GRS for recycled cotton

This will be verified through the ZDHC Gateway.

- Certificate from zippers, rivets and button manufactures confirming no use of electroplating process
- We will use lasers instead of chemicals
- Pumice stones will not be used. Alternates such as rubber stones will be used
- Not used. This will be verified by the use of the ZDHC Gateway, Jeanologia EIM system.

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. This will be verified by reporting wastewater data through the ZDHC Gateway.

The produced volume of wastewater is treated to the ZDHC Wastewater Guidelines.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

N/A

N/A

This will be verified by AM Lab which is accredited by BV Labs and ITS.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



Kipaş Textiles is a vertical 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 with 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.”

– Halit Gümüşer, Managing Director and Board Member, Kipaş Holding





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 40 home laundries (Minimum # is 30) and retain their ability to meet Kipas' minimum test standard for jeans.

A combination of a series physical tests, such as tear strength test, tensile strength test, abrasion test and shrinkage (dimensional change) test. We are applying below test methods:

- Tensile strength test : ASTM D 5034
- Tear strength test: ASTM D 1424
- Shrinkage test : ISO 6330
- Abrasion test : ISO 12947-2

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will 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.

This will be verified by inhouse tests according to Kipas' standards.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting
- Chemicals compliant with REACH

This will be verified by GOTS and/or OCS certifications.

This will be verified through the ZDHC Gateway.

This will be verified by EIM Jeanologia.





RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum. This will be verified by fibre content analysis test method.

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include at least 5% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by GRS and RCS certifications.

Metal rivets will be removed entirely or reduced to a minimum.

N/A

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Jeans will include easy removable buttons.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A However, Kipaş 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.



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™ Gold Certified 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™ Gold Level presents **Pure-D fabrics** and **Smart Loop garments**. Smart Loop; fashioned in DenimKind is the highest form of technology that aims a conscious mindset for collaborating with the design to produce the most responsible jeans – closing the loop and enhancing circularity. By onboarding 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, sales offices in the US and Turkey.

– **Muhammad Mansoor Bilal, VP Marketing, Research & Innovation**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet Soorty Enterprises' minimum test standard for jeans.

This will be verified by:

- 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

Provide information on how to care for the jeans visibly on the garment

Jeans produced to the Guidelines will include an easily accessible label that will include the following information. Ensure that jeans produced are in line with the below:

Care label included with instructions to:

- Reduce washing frequency
- Cold wash – wash at 30 degrees or less
- Avoid tumble-drying.
- Wash inside out

This will be verified by 3rd party physical testing.





MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS)

This will be verified through the ZDHC Gateway and C2C Certified™ Product Standard at Gold Level.

This will be verified by C2C Certified™ Product Standard at Gold Level & Jeanologia EIM scores (Environmental Impact Measurement) & also from manufacturer's process audit



RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

This will be verified by GRS for recycled fibre content material composition test and C2C Certified Product Standard at Gold level.

Jeans will include 5-20% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. This will be verified by GRS/RCS Certifications.

N/A

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

We can offer the logo application to our customers and after their agreement we can use it.

N/A



THE JEANS REDESIGN

PARTICIPANT SPECIFICATIONS

GARMENT MANUFACTURERS



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.”

– Aamir Akhtar, CEO, Arvind Limited





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet Arvind's minimum test standard for jeans.

This will be verified 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

Jeans produced in accordance with the Guidelines will 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

This will be verified by visual inspection of the garments.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRS�) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by chain of custody standards/certificates for organic cotton. We will be able to provide GOTS or OCS certifications.

This will be verified through the ZDHC Gateway.

This will be verified by declaration from manufacturer/process audit





RECYCLABILITY

For further details refer to the Guidelines.

Include a minimum of 98% cellulose-based fibres by weight in total textile composition.	Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.	Metal rivets will be removed entirely or reduced to a minimum.	Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).
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Material composition will meet the 98% cellulosic minimum.

Jeans will include at least 5% and **going up to 40% post-consumer recycled content (PCRC)** on average (by weight) of the total fabric composition.
This will be verified by GRS/RCS certifications for fabrics

N/A

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo	Optional: use of technology that enables sorting.
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N/A



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.

- Jorge Bunchicoff, President, BLUE DESIGN AMERICA
- Joaquin Sandoval, Sustainability and CSR Responsible, BLUE DESIGN AMERICA





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet Blue Design's minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

This will be verified by a set of tests performed by an Accredited Lab (SGS, Intertek, BV):

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

- 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

This will be verified by a third party Accredited Lab (SGS, Intertek, BV).



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by GOTS/OCS certificates (provided by vendors); or GRS for recycled cotton.

This will be verified through the ZDHC Gateway.

This will be verified by Blue Design, which will be using alternative and sustainable methods, such as Laser, Ozone, and organic chemicals to replace bleaching and Potassium Permanganate.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum. This will be verified by composition test performed by an Accredited Lab (SGS, Intertek, BV).

N/A

N/A

The Jeans will include bartacks instead of metal rivets, wooden buttons, and organic cotton or recycled polyester labels and Blue Design confirms it is easy to remove by performing a simple tearing or cut with the help of scissors.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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.

– **Danyal Lakdawala, Product Development and Director, Creative Knits**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet [TTI Testing Laboratories]'s minimum test standard for jeans.

This will be verified by conducting various dimensional, appearance and performance testing by third party.

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will 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

This will be verified by In-house quality and care management team.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

This will be verified by Organic Cotton Standard and Global Organic Textile Standard.

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

This will be verified through the ZDHC Gateway.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. Use of traditional bleaching process

This will be verified by ZDHC Gateway and by requesting relevant certification from the laundries/facilities that are going to be a part of the production process.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

The metal rivets will be reduced to a minimum, they will also be easily removable.

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.

This will be verified by third party test for eg. Jeanologia EIM reports.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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 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.

– **Catherine Chiu, General Manager - Corporate Quality and Sustainability, Crystal International**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet Crystal International Group Limited's minimum test standard for jeans.

This will be verified by:

- Tensile strength test ASTM D5034
- Tear strength test ASTM 01424
- Abrasion Resistance ASTM D4966
- Seam Strength ASTM D1683

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will 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.

This will be verified by presence of care label on the product.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting

This will be verified by use of certified organic fibres (Global Organic Textile Standard (GOTS) or Organic Content Standard (OCS)).

This will be verified through the ZDHC Gateway and the corresponding ZDHC Conformance Certificates.

This will be verified by showing the wash recipe of what is used in the production process.





RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum. This will be verified by fibre composition disclosed on Care and Content label.

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include 5% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. This will be verified by use of certified recycled fibres Recycled Claim Standard (RCS).

Metal rivets will be removed entirely or reduced to a minimum.

The metal rivets will be reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The Jeans will include trims and the Organisation confirms it is easy to remove by pre processing for recycling.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

The Jeans Redesign logo will be used and will be presented on the product.

Optional: use of technology that enables sorting.

N/A



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 fair trade, 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%.





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet DEMCO's minimum test standard for jeans.

Jeans produced to the Guidelines will include an easily accessible label that will include the following information. Ensure that jeans produced are in line with the below:

This will be verified by:

- 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

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



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by GOTS and OEKO TEX

This will be verified through the ZDHC Gateway. Presently, the chemicals list complies with the MRSL

- PP will not be used starting January 2020
- Pumice Stones are replaced by eco-stones
- Sandblasting : stopped 10 years ago

This will be verified through EIM (Jeanologia).





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum.

Pre-consumer recycled content available. Ongoing tests with post consumer content.

Use of natural hardware by 2020

Use of screw button by 2020

This will be verified by GRS.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

- In case RIFD is used, it is attached to the label which can easily be removed by scissors.



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.

- Mariyah Farhan, Director, Denim Clothing Company





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 Home Laundries (Minimum # is 30) and retain its ability to meet DENIM CLOTHING COMPANY's minimum test standard for jeans.

This will be verified by following tests performed at our Inhouse 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
- 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

Provide information on how to care for the jeans visibly on the garment

Jeans produced to the Guidelines will include an easily accessible label that will include the following information. Ensure that jeans produced are in line with the below:

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

This will be verified by through visual inspection of the garments.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by Global Organic Textile Standard / Organic Content Standard Transaction Certificates.

This will be verified through the ZDHC Gateway.

a. We will obtain declaration from metal trims manufacturers stating no use of electroplating process.
 b. Lasers will be used as substitute
 c. Stone Effects will be obtained through use of E-Flow. Ozone and Enzymes.
 d. No Sand Blasting will be used.
 Additionally the processes will be verified by Jeanologia EIM system.



RECYCLABILITY

For further details refer to the Guidelines.

<p>Include a minimum of 98% cellulose-based fibres by weight in total textile composition.</p>	<p>Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.</p>	<p>Metal rivets will be removed entirely or reduced to a minimum.</p>	<p>Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).</p>
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Jeans composition will meet the 98% cellulosic minimum.

This will be verified by Lab testing.

Jeans will include 5% post-consumer recycled content (PCRC) on average (by weight) of the total jeans composition.

This will be verified by Global Recycle Standard / Recycle Claim Standard Transaction Certificates.

N/A

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

<p>Use Jeans Redesign logo</p>	<p>Optional: use of technology that enables sorting.</p>
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N/A

N/A



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.”

- Mostafiz Uddin, Managing Director of Denim Expert Limited





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet Denim Expert's minimum test standard for jeans.

This will be verified by the physical tests below:

- Ability to achieve a rating of 3.0 after 30 Home laundry, test method AATCC 124 (3)
- Dimensional stability (ISO 6330)

Provide information on how to care for the jeans visibly on the garment

Jeans produced to the Guidelines will include an easily accessible label that will include the following information. Ensure that jeans produced are in line with the below:

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

This will be verified by garment testing companies SGS, BV, TÜV, ITS



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting

This will be verified by GOTS, OCS, OEKO-TEX

This will be verified through the ZDHC Gateway

b. Potassium Permanganate

We have replaced the Potassium Permanganate with Peroxidase enzymes and ZDHC approved Level 1 alternate chemicals to fade or to give used look to the garments.

c Stone finishing

We have replaced the stones with no-stone technology washing machines which have abrasive plates are fixed into the inner drum of the machine and also using synthetic stones which can withstand 2000 hours of wash cycles. The garments/ Jeans 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

Sand blasting is a process which gives distressed look to the jeans, we simulate similar aesthetic look by deploying highly precise and modern laser machine to simulate similar kind of distress look on the Jeans.





RECYCLABILITY

For further details refer to the Guidelines.

<p>Include a minimum of 98% cellulose-based fibres by weight in total textile composition.</p>	<p>Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.</p>	<p>Metal rivets will be removed entirely or reduced to a minimum.</p>	<p>Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).</p>
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This will be verified by CERES

Jeans will include a maximum of 20% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition

N/A

N/A

This will be verified by UNIFY for REPREEVE and "CERES" for recycled cotton.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

<p>Use Jeans Redesign logo</p>	<p>Optional: use of technology that enables sorting.</p>
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- In case RIFD is used, it is attached to the label which can easily be removed by scissors.



With a production capacity of 300-350K/month and 50K in sample services, Denimvillage (Suglobal Tekstil ve Konfeksiyon Sanayi 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 with its denim washes for the past two decades.

Ever since we first started our operations, we have focused tirelessly on sustainable value creation through sustainable management and decide to be authentically sustainable every day. An example is DV's decision to not include any sandblasting lines from inception although these operations were commonplace.

We believe that sustainability is a continuous act of commitment to long-lasting social and environmental justice that is rewarding for local and global economies; a commitment that is intrinsically valuable and requires the application of innovative approaches in the complex and non-linear garment manufacturing industry that exists today.

We know that DV is not alone in its journey. That is why, we endeavour to make our customer portfolio more than 70% sustainable by 2022, and work exclusively with customers that show credible commitment to the circular model. By choosing suppliers who make considerable efforts in using harmless processes, high quality accessories and fabric, we strive to guarantee better material health and durability. Achieving resourcefulness in both pre- and post-consumer processes means optimizing the life cycle of a pair of jeans while operating within the circular model. At DV, this will set the tone for the next 5 years.

The pillars of our planned circular model will be incrementally carried out within the supply chain where we source, recreate and reuse materials at all three stages: design & collection, product development and production processes, without disposing them in the landfills.

In rethinking the design and development and production processes of a pair of jeans, we do not only want to achieve sustainable development for our business, but to leave the world a better place.

We were excited to hear about the Jeans Redesign Initiative by EMF because it meant that our individual efforts for the past 20 years were finally joined with others in a collective space. Thus, this is a valuable project that will allow us to renew this commitment in a new era and contribute to reforming the birth of a pair of jeans.

– Hadi Karasu, Chairman





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet Denimvillage's minimum test standard for jeans.

This will be verified by the physical tests below:

- 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)

Jeans produced to the Guidelines will 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

This will be verified by visual inspections of the garments i.e. presence of care label.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by the relevant certifications e.g. GOTS possessed by our suppliers.

Our company is registered on ZDHC Gateway and we abide by the products listed on MRSL. Therefore, this will be verified through the ZDHC Gateway.

- a. No electroplating.
- b. We are using ozone and laser to be able to fully eliminate the use of PP.
- c. We are using neutral enzymes, ozone and e-flow techniques to be able to fully eliminate stone-finishing.
- d. We have never used sand blasting.

In addition to above, we are using latest sustainable wash technologies by Jeanologia (ozone, laser and e-flow) to achieve low impact by reducing the use of water and chemicals. We engage in energy and water-saving projects and have an advanced and effective waste management technology. This will be verified by a software program developed by our IT and R&D teams which assess environmental and other impact regardless of the brand of the machines.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

We use 98% cellulose-based fibres (mostly cotton) in the jeans on demand (depending on the client).

This will be verified by the material composition of fabric.

We are already using pre-consumer recycled content. Left over fabrics or jeans and other materials (clippings, scraps etc.) that emerge during the production are sent to our strategic project partners (recycle centers) where they are turned into their raw state of fibre. Our fabric supplier who remanufactures the fabric then buys and uses these recycled fibres, which may comprise materials recycled up to 100%. Denimvillage - Suglobal then buys and uses this recycled fabric in jeans. Pocketing of the jeans may consist of recycled products too.

We are currently in dialogue with our customers to form greater collaboration to work towards a project that contributes to the use of post-consumer recycled content in our products.

Denimvillage - Suglobal is 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, bartacking to replace metal rivets etc. for this project.

The Jeans will include easily replaceable etiquettes and confirm it is easy to remove by performing simple removal methods such as tearing or cutting e.g. with the help of scissors.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

Throughout the production processes, we use internal sorting connected to our software system. Our 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, Denimvillage - Suglobal'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. We intend to implement it at a larger-scale as part of our intelligent management for tracking and inventory control. We will work towards implementing the existing mechanism (or establishing a new one) for our pilot project within the scope of this initiative.



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 & we have been audited by Fairwear Foundation. We are qualified to realize Eco-Washes for Denim (No Chlorine/No Permanganate/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 organizations at the forefront of circularity: the Ellen MacArthur Foundation.

– Romain Narcy, Board Member | Partner, Innovation & Strategy, Ereks-Blue Matters





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet Ereks's minimum test standard for jeans.

This will be verified by:

- 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

To be verified by an independent laboratory validated for physical tests.

Jeans produced in accordance with the Guidelines will 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

This will be verified by Information on reducing washing frequency, instructions to wash at low temperatures (30 degrees of below), instructions to avoid tumble drying.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting
- Sodium Hypochlorite

This will be verified by chain of custody standards/certificates for organic cotton. We will be able to provide GOTS or OCS certifications & fiber analysis realised by a third party laboratory.

This will be verified through the ZDHC Gateway1.

This will be verified by declaration from manufacturer/process audit.



RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum.

This will be verified by GRS/RCS certifications for fabrics.

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include at least 5 % and going up to 40% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by GRS/RCS certifications for fabrics.

Metal rivets will be removed entirely or reduced to a minimum.

N/A

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

N/A 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 this Jeans Redesign project.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

Looking into implementing tracking technology.

This year Frontline Clothing HK is celebrating 25 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-site “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’s 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 Jeans Redesign is an opportunity to achieve that goal. We are very excited to know we are not alone”

– Roel Vossen, Founder and CEO, Frontline Clothing, Ltd.





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet Frontline Clothing's minimum test standard for jeans.

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)

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will 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

This will be verified 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.





MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting

This will be verified by the Global Organic Textile Standard (GOTS) or Organic Cotton Standard (OCS).

This will be verified through the ZDHC Gateway.

This will be verified 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.



RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

This will be verified by Bureau Veritas, ITS and SGS. Additionally, this will be visible to consumer on the care label.

This will be verified by Global Recycled Standard (GRS).

N/A

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

By using blockchain technology through a Q.R. code that stays with the jean throughout its life, all information about the jean will be listed, such as, fabric composition, chemicals used, EIM score and all certifications.



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.

As a supplier to our global customer portfolio of brands, we hope to open better manufacturing pathways that lead to a future of circularity. 10 years ago, Hirdaramani launched Asia's first carbon neutral, LEED platinum certified Green factory. Most recently, in 2019 we were proud to announce that greenhouse gas (GHG) emissions from energy use of our Sri Lankan apparel vertical have reached a net-zero status. We look forward to a transformative journey in collaboration with the Ellen MacArthur Foundation.

The Hirdaramani Group has reinforced its strong commitment to sustainability by joining the Ellen MacArthur Foundation *Make Fashion Circular* in 2019 and actively participates on the collaborative Jeans Redesign.

"We are extremely confident that through this collaboration, we will be able to develop further solutions to reduce waste and pollution throughout our operations and within the total fashion industry."

- Nikhil Hirdaramani, Director, Hirdaramani Group





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet HIRDARAMANI's minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

This will be verified by: Tearing, Tensile, Abrasion, Seam Slippage, Stretch and recovery (Testing method – USA – AATCC, EU – ASTM & ISO)

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

- 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

This will be verified by physical testing.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. [Optional - Insert additional]

This will be verified by OCS, RCS, GOTS certificates.

This will be verified through the ZDHC Gateway and the Oeko-Tex certification (raw material and washing plants).

This will be verified by Jeanologia review of EIM scores (Environmental Impact Measurement).





RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum. This will be verified by composition test.

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will start with 10 % post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. This will be verified by traceability by record.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The Jeans will include form of printed ID/Info Code and it is easy to remove because it is printed on the garment and not difficult to remove at end of life of the garment.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A



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 & exporting woven products - denim/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.

– Miran Ali, Managing Director, Remi Holdings





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet Remi Holding's minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

This will be verified by:

- 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

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

This will be verified by SGS or Intertek.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. [Optional - Insert additional]

This will be verified by Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS) Certification.

This will be verified through the ZDHC Gateway.

This will be verified by product guidelines in code of conduct, assessment of processes and provided MSDS of our production partners, independent lab analytics, certificates such as an OEKO-TEX 100.





RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum.

The weight of all components of denim garment will be verified by accredited QA third party test labs.

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include 5% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by use of certified recycled fibres (Global Recycled Standard (GRS) or Recycled Claim Standard (RCS).

Metal rivets will be removed entirely or reduced to a minimum.

N/A

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The Jeans will include metal trims, RFID and the Organisation confirms it is easy to remove by cutting out.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

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

Optional: use of technology that enables sorting.

N/A



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 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 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."

– Sanjeev Bahl, CEO, SAITEX





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet Saitex's minimum test standard for jeans.

This will be verified by:

- 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)

Jeans produced in accordance with the Guidelines will 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

This will be verified by Bureau Veritas.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting
- [Optional - Insert additional]

This will be verified by the Global Organic Textile Standard (GOTS) certification.

This will be verified through the ZDHC Gateway. Saitex is the only **Bluesign** certified laundry in the world which corresponds to level 3 ZDHC.

This will be verified by Saitex, which will be using alternative methods such as Laser, Ozone, Nano spray, and natural alternatives to PP.





RECYCLABILITY

For further details refer to the Guidelines.

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

This will be verified by Bureau Veritas,

Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by Global Recycled Standard (GRS)

Metal rivets will be removed entirely or reduced to a minimum.

N/A

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

Fibretrace is a technology which uses pigments and minerals that are embedded in the fibre to bring traceability 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 it has gone through, chemicals it contains, environmental impact, certifications of manufacturers etc.



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 & exporting woven products - denim/non-denim lifestyle, for mens, ladies & 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 & 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 & pollution locally, and globally for the sake of our future generations.

– Miran Ali, Managing Director, Tarasima Apparels





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet Tarasima Apparels Limited's minimum test standard for jeans.

This will be verified by:

- 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

Jeans produced in accordance with the Guidelines will 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.

This will be verified by SGS or Intertek.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting
- [Optional - Insert additional]

This will be verified by Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS) Certification.

This will be verified through the ZDHC Gateway.

This will be verified by product guidelines in code of conduct, assessment of processes and provided MSDS of our production partners, independent lab analytics, certificates such as an OEKO-TEX 100.





RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum.

The weight of all components of denim garment will be verified by accredited QA third party test labs.

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include 5% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by use of certified recycled fibres (Global Recycled Standard (GRS) or Recycled Claim Standard (RCS).

Metal rivets will be removed entirely or reduced to a minimum.

N/A

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

The Jeans will include metal trims, RFID and the Organisation confirms it is easy to remove by cutting out.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

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

Optional: use of technology that enables sorting.

N/A



Zamira Fashion Limited is the world's first garment manufacturer to launch denim with Oeko-tex 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.

Jeans Redesign by the Ellen MacArthur Foundation has four areas in its guidelines – Durability, Material Health, Recyclability and Traceability. These are closely aligned with Zamira's very own sustainability-oriented initiative, Zamira Cares, that is driven by four main pillars – Fabrics & Materials, Safe to Wear & Traceability, Chemical Managements and New Technologies.

We look forward to a transformative journey by joining the Ellen MacArthur Foundation and its journey on 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!

– Thomas Muller, Managing Director, Zamira Fashion Limited





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet ZAMIRA FASHION LIMITED minimum test standard for jeans.

This will be verified by:

- 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 ISO 105-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

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will 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

This will be verified by lab testing from beginning of production process. Additionally, this will be presented on the care label in the garments.





MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. [Optional - Insert additional]

This will be verified by Organic Content Standard (OCS). In addition, in Zamira, these fibres are not only limited to cotton, we have extended into Refibra, Tencel and mixed hemp.

This will be verified through the ZDHC Gateway, Higg Index and Oekotex STeP.

This will be verified by Zamira Fashion, which implements strict Code of Conduct and guidelines that authenticates our production partners following the highest level of technical and environmental conditions. Additionally, with the use of cutting-edge technologies like laser, nanobubbles and ozone together with PP and bleach alternatives, they are measured with Jeanologia's EIM software.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

This will be verified by composition test and quality checks on the care labels.

This will be verified by Global Recycled Standard (GRC) or Recycled Claim Standard (RCS).

N/A

The Jeans will include Oeko-tex Made in Green tag which includes a QR code to scan and verify the garment and the Organisation confirms it is easy to remove by performing the following an easy procedure of removing the tag.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

We will mention to our customers the use of the logo on the tags and it will be subjected to their approval.

N/A



THE JEANS REDESIGN

PARTICIPANT SPECIFICATIONS

FABRIC MILLS



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.

The 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 2020. 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.





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the fabric to the garment manufacturers, e.g. whether fabric needs caution due to special process of finish

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet Advance Denim's minimum test standard for jeans.

Jeans produced to the Guidelines will include an easily accessible label that will include the following information:

This will be verified by:

- Tensile strength test ASTM D5034
- Tear strength test ASTM 01424

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying
- No chlorine bleach

This will be verified by 3rd party testing company



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Denim fabric is free of hazardous chemicals and made with chemicals that will comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.¹

The wastewater volume created for denim fabric is a maximum of 0.025 m³/yard or below

This will be verified by GOTS and/or OCS certifications

This will be verified through the ZDHC Gateway.

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.

The produced volume of wastewater is treated to the ZDHC Wastewater Guidelines.

This will be verified by reporting wastewater data through the ZDHC Gateway.²



ELLEN MACARTHUR FOUNDATION

¹ https://www.roadmaptozero.com/fileadmin/pdf/Files_2019/ZDHC_WastewaterGuidelines_V1.1_JUL19.pdf

² <https://www.roadmaptozero.com/gateway/wastewater-module>



RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum.

N/A

N/A

This will be verified by fibre content analysis test.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Optional: use the Jeans Redesign logo on the fabric to ship to the garment manufacturer. Provide any certification needed to validate the fabric is Guideline-compliant.

Optional: use of technology that enables sorting.

N/A



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.

- Haya Iqbal Ahmed, Founder, Artistic Fabric Mills
- Kirsty McClean, Brand Strategist, Artistic Fabric Mills





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines, will 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.

This will be verified by:

- 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

Furthermore, we are Oeko Tex 100 Class I product certified.

Jeans produced in accordance with the Guidelines will 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

This will be verified by 3rd party physical testing lab.





MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. [Optional - Insert additional]

This will be verified by Global Organic Textile Standard (GOTS) / Organic Content Standard (OCS) and also Transaction Certificate is issued after every shipment / transaction by the certification body (Control Union) which is also known source to verify the claim of the contents.

This will be verified through the ZDHC Gateway and IPE platform and Cradle to Cradle 1 product 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.

This will be verified by Cradle to Cradle (C2C) certified product standard at Gold level.

We will use laser instead of chemical. This will be verified by clean chain portal-ZDHC gateway portal. We doesn't use pumice stones. We can provide relevant certification / proof if requested.





RECYCLABILITY

For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum.

This will be verified by material composition testing. We will be able to produce the relevant certification if requested.

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Jeans will include minimum 5% Pre-consumer Waste (White Cotton) under Recycled Claim Standard (RCS), Artistic Fabric Mills is first cradle to cradle certified company making products with Pre-consumer Waste (white cotton), also we are certified with Global Recycled Standard (GRS) post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. This will be verified by Recycled Claim Standard (RCS) – Control Union certification body.

Metal rivets will be removed entirely or reduced to a minimum.

N/A

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

We can offer the logo application to our customers and after their agreement we can use it.

Optional: use of technology that enables sorting.

Artistic Fabric Mills is first company who had installed recycling plants PIW - Post Industrial Waste & PCW - Post Consumer Waste in Pakistan. We have our own approved sorting centre certified under certifications; Recycled Claim Standard (RCS) and Global Recycled Standard (GRS) by Control Union certification body.



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.





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the fabric to the garment manufacturers, e.g. whether fabric needs caution due to special process of finish

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet Cone Denim's minimum test standard for jeans.

Jeans produced to the Guidelines will include an easily accessible label that will include the following information:

This will be verified by:

- The fabric should test at a minimum of 65% of original strength after 30 Home Laundries
- Rigid Tear-AST MD 14241
- Rigid Tensile-ASTMD 5034

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying
- Use non-chlorine bleach if needed

This will be verified by specification sheets provided to the garment manufacturer.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Denim fabric is free of hazardous chemicals and made with chemicals that will comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.¹

The wastewater volume created for denim fabric is a maximum of 0.025 m³/yard or below

This will be verified 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.

This will be verified through the ZDHC Gateway.

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.

The produced volume of wastewater is treated to the ZDHC Wastewater Guidelines.

This will be verified by reporting wastewater data through the ZDHC Gateway.²



ELLEN MACARTHUR FOUNDATION

¹ https://www.roadmaptozero.com/fileadmin/pdf/Files_2019/ZDHC_WastewaterGuidelines_V1.1_JUL19.pdf

² <https://www.roadmaptozero.com/gateway/wastewater-module>



RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum.

This will be verified by purchase records and 3rd party testing.

Denim fabric will include up to 5% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by RCS Certification.

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Optional: use the Jeans Redesign logo on the fabric to ship to the garment manufacturer. Provide any certification needed to validate the fabric is Guideline-compliant.

Optional: use of technology that enables sorting.

N/A



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.

– Mr. Rizwan Shafi, Executive Vice President, Crescent Bahuman Limited





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum #is 30) and retain their ability to meet Crescent Bahuman's minimum test standard for jeans

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

This will be verified by performing the following tests:

- 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

- 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 we are manufacturers and the care instructions are as per brands instructions. Most of these instructions are already provided on care labels.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. [Optional - Insert additional]

Cotton will be organically grown.

This will be verified through the ZDHC Gateway.

This will be verified 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 our process. This will be verified by ZDHC Gateway

This will be verified by Global Organic Textile Standard.

MSDS provided by our chemical providers, world renowned certifications like OEKO-TEX 100, we are using EIM by Jeanalogia to calculate low environmental impact scores.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

N/A

N/A

This will be verified by Content analysis testing method: Deviation of Fibre content ISO 1833. Additionally weight of all components of garment can be verified by third party accredited QA labs.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

N/A as this is subject to approval from the brands.

N/A



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.

– Gökhan Ünsal, Deputy General Manager, DNM Textile





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum #is 30) and retain their ability to meet DNM Textile's minimum test standard for jeans

This will be verified by performing the following 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

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

- Reduced washing frequency to be achieved min water consumption
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

This will be verified by the presence of a care label attached to the technical data sheet and by in-house laboratory.





MATERIAL HEALTH

For further details refer to the Guidelines.

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

Denim fabric is free of hazardous chemicals and made with chemicals that will comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.¹

The wastewater volume created for denim fabric is a maximum of 0.025 m³/yard or below

This will be verified by Organic Content Standard (OCS) and/or Global Organic Textile Standard (GOTS).

This will be verified through the ZDHC Gateway.

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.

This will be verified by reporting wastewater data through the ZDHC Gateway.²

We have water treatment unit with ZLD technology. There is no any production process wastewater. This will be verified through the Water Footprint Certification.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum. This will be verified by accredited QA third party test labs.

Denim fabric will include 20% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. This will be verified by use of certified recycled fibers (Global Recycle Standard (GRS) or Recycle Claim Standard (RCS)).

Denim fabric will include identification labels which will be easy to remove.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

We will use the Jeans Redesign logo on the fabric.

N/A



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 a drastically reduce environmental impact.

Green Lab aligns 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.

– Pasquale Russo Spina, Sustainable Manager, Green Lab





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the jeans visibly on the garment

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries (Minimum # is 30) and retain their ability to meet Green Lab's minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:

This will be verified by Green Lab internal physical test of:

- 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

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

This will be verified by N/A



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. [Optional - Insert additional]

This will be verified by N/A

This will be verified through the ZDHC Gateway

This will be verified by self-assessments Jeanologia EIM reports & score PP, stone and sandblasting will be replaced with alternative chemicals and lower impact technologies





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Metal rivets will be removed entirely or reduced to a minimum.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Material composition will meet the 98% cellulosic minimum.

N/A

N/A

N/A

This will be verified by N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Use Jeans Redesign logo

Optional: use of technology that enables sorting.

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

N/A



Hantex is one of Pakistan's premier spinning mill 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.

- Mariyah Farhan, Director, Hantex





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the fabric to the garment manufacturers, e.g. whether fabric needs caution due to special process of finish

Fabric produced in accordance with the Guidelines will be able to withstand a minimum of 30 Home Laundries (Minimum #30) and retain its ability to meet HANTEX's minimum test standard for denim fabric.

This will be verified by following tests performed at our Inhouse Lab:

- 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

Jeans produced to the Guidelines will include an easily accessible label that will include the following information.

Ensure that fabric produced is in line with the below:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

If the fabric needs caution due to special process, the care instruction may be provided to garment manufacturer through different communication channels including email, specs sheet, labels etc.





MATERIAL HEALTH

For further details refer to the Guidelines.

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

This will be verified by Global Organic Textile Standard/Organic Content Standard Transaction Certificates.

Denim fabric is free of hazardous chemicals and made with chemicals that will comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

This will be verified through the ZDHC Gateway.

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.¹

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.

This will be verified by reporting wastewater data through the ZDHC Gateway and IPE Platform.

The wastewater volume created for denim fabric is a maximum of 0.025 m³/yard or below

The produced volume of wastewater is treated to the specifications 2c) of these Guidelines.



¹ https://www.roadmaptozero.com/fileadmin/pdf/Files_2019/ZDHC_WastewaterGuidelines_V1.1_JUL19.pdf

² <https://www.roadmaptozero.com/gateway/wastewater-module>



RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum.

Denim fabric will include 5% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

N/A

This will be verified by Lab testing.

This will be verified by Global Recycle Standard / Recycle Claim Standard Transaction Certificates.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Optional: use the Jeans Redesign logo on the fabric to ship to the garment manufacturer. Provide any certification needed to validate the fabric is Guideline-compliant.

Optional: use of technology that enables sorting.

N/A

N/A



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 3rd 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 & 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 thing 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 like a challenge. This should be an example that it can be done.”

- Adriano Goldschmied, President / Founder of House of Gold.





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the fabric to the garment manufacturers, e.g. whether fabric needs caution due to special process of finish

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet House of Gold's (through Blue Diamond: Xingtai H&J Textiles Co., Ltd) minimum test standard for jeans.

Jeans produced in accordance with the Guidelines will include an easily accessible label showing the following information:
N/A: Depends on clients' brand care instructions.

This will be verified by:

- ASTM D-1424 (Tear test)
- ASTM D-5034 (Tensile test)
- ISO testing upon client request.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Denim fabric is free of hazardous chemicals and made with chemicals that will comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.¹

The wastewater volume created for denim fabric is a maximum of 0.025 m³/yard or below

This will be verified by GOTS certified organic cotton.

We have inquired to joining ZDHC in August 2019, but due to a Chinese NGO law they are not allowed to accept Chinese contributors at this moment. We are compliant with the requirements of the ZDHC MRSL.

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.

This will be verified by reporting wastewater data through the ZDHC Gateway.²

Our average wastewater is at 0.010m³/yd. The produced volume of wastewater is treated to the ZDHC Wastewater Guidelines.



¹ https://www.roadmaptozero.com/fileadmin/pdf/Files_2019/ZDHC_WastewaterGuidelines_V1.1_JUL19.pdf

² <https://www.roadmaptozero.com/gateway/wastewater-module>



RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum.

80% of our total production meets 98-100% cellulose based fibres.

Currently 10% of our total production is from Pre-Consumer (Post-Industrial) recycled content. As more fibre companies provide recycled products, our goal is to have 50% of our production made with Pre-Consumer content. We currently do not have any Post-Consumer Recycled Content because we do not have a reliable source yet.

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Optional: use the Jeans Redesign logo on the fabric to ship to the garment manufacturer. Provide any certification needed to validate the fabric is Guideline-compliant.

Optional: use of technology that enables sorting.

N/A

N/A



Indigo Garments, 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.

- Mariyah Farhan, Director, Indigo Garments FZE



DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the fabric to the garment manufacturers, e.g. whether fabric needs caution due to special process of finish

Fabric produced in accordance with the Guidelines will be able to withstand a minimum of [30] Home Laundries (Minimum # is 30) and retain its ability to meet [INDIGO GARMENTS FZE]'s minimum test standard for denim fabric.

This will be verified by Third Party Testing Lab:

- Appearance: CA-TM 02
- Dimensional stability ISO 6330
- Tensile force ISO 139342
- Seam force ISO 13935-2
- Abrasion ISO 12947-2

Jeans produced to the Guidelines will include an easily accessible label that will include the following information.

Ensure that fabric produced is in line with the below:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

This will be verified by visual inspection of the garments.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Denim fabric is free of hazardous chemicals and made with chemicals that will comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.¹

In addition, the use of the following chemicals or processes is prohibited:

- a. Conventional electroplating
- b. Potassium Permanganate
- c. Stone finishing
- d. Sand blasting
- e. [Optional - Insert additional]

This will be verified by Organic Content Standard (OCS) or Global Organic Textile Standard (GOTS) or Recycled Cotton (GRS/RCS).

This will be verified through the ZDHC Gateway.

Our company abide by the product list on MRSL and this will be verified by ZDHC Gateway.

This will be verified by Jeanologia review of EIM scores (Environmental Impact Measurement)

¹ https://www.roadmaptozero.com/fileadmin/pdf/Files_2019/ZDHC_WastewaterGuidelines_V1.1_JUL19.pdf

² <https://www.roadmaptozero.com/gateway/wastewater-module>



RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum.

Denim fabric will include 5% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

N/A

This will be verified by OCS, RCS and GOTS certifications.

This will be verified by GRS and RCS certificate.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Optional: use the Jeans Redesign logo on the fabric to ship to the garment manufacturer. Provide any certification needed to validate the fabric is Guideline-compliant.

Optional: use of technology that enables sorting.

We can use Jeans Redesign logo on the jeans if authorised by our customer.

N/A

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 GreenCO Gold Certified company. We are Oekotex, 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

– Mr Srihari Balakrishnan, Managing Director, KG Fabriks





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the fabric to the garment manufacturers, e.g. whether fabric needs caution due to special process of finish

Fabric produced in accordance with the Guidelines will be able to withstand a minimum of 30 Home Laundries and retain its ability to meet KG FABRIKS' minimum test standard for denim fabric.

Jeans produced to the Guidelines will include an easily accessible label that will include the following information.

This will be verified by:

- Third party test report like SGS / ITS

Ensure that fabric produced is in line with the below:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

We will give the precaution details in case of special fabrics.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Denim fabric is free of hazardous chemicals and made with chemicals that will comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.¹

The wastewater volume created for denim fabric is a maximum of 0.025 m³/yard or below

This will be verified by GOTS certificate.

This will be verified through the ZDHC Gateway. Our ZDHC gateway ID is A341PE54.

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.

The produced volume of wastewater is treated to the specifications 2c) of these Guidelines. We use less than 15 liters to make a kilogram of denim.

This will be verified by reporting wastewater data through the ZDHC Gateway.

This is certified by TUV NORD. We are certified Green Denim company. We are also National Water Awards Winner for 2018 and 2019.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum.

This will be verified by third party fabric composition report for required quality.

Denim fabric will include 5 to 20% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by GRS / RCS certificate

We do not attach any material.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Optional: use the Jeans Redesign logo on the fabric to ship to the garment manufacturer. Provide any certification needed to validate the fabric is Guideline-compliant.

Optional: use of technology that enables sorting.

N/A

N/A



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.

– Gulsun Ocak Ozdemir, UK Sales Manager, Naveena Denim Mills Karachi





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the fabric to the garment manufacturers, e.g. whether fabric needs caution due to special process of finish

Fabric produced in accordance with the Guidelines will be able to withstand a minimum of 30 Home Laundries (Minimum # is 30) and retain its ability to meet Naveena Exports Limited's minimum test standard for denim fabric. This will be verified by:

- 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

Jeans produced to the Guidelines will include an easily accessible label that will include the following information.

Ensure that fabric produced is in line with the below:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

This will be verified by accredited third party tests.





MATERIAL HEALTH

For further details refer to the Guidelines.

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

Denim fabric is free of hazardous chemicals and made with chemicals that will comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.¹

The wastewater volume created for denim fabric is a maximum of 0.025 m³/yard or below

This will be verified by the certification of Organic Cotton Standard (OCS) signifying our 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 our product being manufactured mainly from organic material that are compliant to the environmental regulations. Also, the Transaction Certificates (TC) generated through Control Union will identify the value chain of our product from input to final consumer are certified through defined standards.

This will be verified 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 unharmed to human health and the environment.

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.

This will be verified by reporting wastewater data through the ZDHC Gateway by publishing up to date information regarding our various wastewater treatment process on the portal along with verified test reports.

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.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum.

This will be verified by third party fabric composition report for required quality.

Denim fabric will include 5 to 20% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by GRS / RCS certificate

We do not attach any material.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Optional: use the Jeans Redesign logo on the fabric to ship to the garment manufacturer. Provide any certification needed to validate the fabric is Guideline-compliant.

Optional: use of technology that enables sorting.

N/A

N/A



Since its inception, ORTA has been weaving a denim heritage passed from generation to generation. Founded in 1953, ORTA transformed from a spinning & 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.

– **Sebla Onder, Sustainability Specialist, ORTA**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the fabric to the garment manufacturers, e.g. whether fabric needs caution due to special process of finish

Fabric produced in accordance with the Guidelines will be able to withstand a minimum of 30 Home Laundries (Minimum #is 30) and retain its ability to meet ORTA's minimum test standard for denim fabric.

Jeans produced to the Guidelines will include an easily accessible label that will include the following information.

This will be verified by:

- Tear strength test (ASTM D 1424)
- Tensile strength test (ASTM D 5034)

Ensure that fabric produced is in line with the below:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying
- No chlorine bleach



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Denim fabric is free of hazardous chemicals and made with chemicals that will comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.¹

The wastewater volume created for denim fabric is a maximum of 0.025 m³/yard or below

This will be verified by GOTS or OCS for organic cotton qualities and/or Lenzing certification for TENCEL, TENCEL X Refibra, Lenzing Modal, Lenzing Ecovero fibres containing fabrics and mill claims.

This will be verified through the ZDHC Gateway.

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.

This will be verified by reporting wastewater data through the ZDHC Gateway.

The produced volume of wastewater is treated to the specifications 2c) of these Guidelines.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum.

This will be verified by the mill claim, GOTS/OCS certification and/or certification from Lenzing for branded fibres.

Denim fabric may include min 5% max 20% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by mill claim and/or GRS/RCS certification.

Denim fabric will not include any additional material.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Optional: use the Jeans Redesign logo on the fabric to ship to the garment manufacturer. Provide any certification needed to validate the fabric is Guideline-compliant.

Optional: use of technology that enables sorting.

N/A

N/A



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 & 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 STANDART100, 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.

– **Tim Huesemann, Sales Director, Panther Denim**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the fabric to the garment manufacturers, e.g. whether fabric needs caution due to special process of finish

Fabric produced in accordance with the Guidelines will be able to withstand a minimum of 30 Home Laundries and retain its ability to meet Panther Denim's minimum test standard for denim fabric.

Jeans produced in accordance to the Guidelines will include an easily accessible label that will include the following information.

This will be verified by:

- 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;
- Above tests can be tested in either mill's inhouse third party labs.

Ensure that fabric produced is in line with the below:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

This will be verified by mill's inhouse testing lab or third party labs.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Denim fabric is free of hazardous chemicals and made with chemicals that will comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.¹

The wastewater volume created for denim fabric is a maximum of 0.025 m³/yard or below

This will be verified by GOTS and/or OCS certifications from Control Union Certifications B.V.

This will be verified through the ZDHC Gateway.

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.

This will be verified by reporting wastewater data through the ZDHC Gateway.

The wastewater volume created for denim fabric is 0.019m³/yard.

The produced volume of wastewater is treated to the specifications ZDHC Wastewater Guidelines.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum.

Denim fabric will include 5 % post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

N/A

This will be verified by mill's fabric data sheet based on our inhouse testing labs or other third party lab tests on fibre content.

This will be verified by RCS Certification from Control Union Certifications B.V.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Optional: use the Jeans Redesign logo on the fabric to ship to the garment manufacturer. Provide any certification needed to validate the fabric is Guideline-compliant.

Optional: use of technology that enables sorting.

N/A

N/A



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 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.”

- Andy Zhong, Marketing Director





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the fabric to the garment manufacturers, e.g. whether fabric needs caution due to special process of finish

Jeans produced in accordance with the Guidelines will be able to withstand a minimum of 30 home laundries and retain their ability to meet Prosperity Textiles' minimum test standard for jeans.

This will be verified by:

- A full set of Fabric Physical Tests including Abrasion resistance, Dimensional stability, Colour fastness, Tensile strength and Tearing Strength
- Tested at mill's inhouse test lab or 3rd party labs based on different market standards such as AATCC, ASTM, ISO and GB/T

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

This will be verified by sharing information on Prosperity Textile's communication tools like website, presentations, product pages, labels, etc.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Denim fabric is free of hazardous chemicals and made with chemicals that will comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.¹

The wastewater volume created for denim fabric is a maximum of 0.025 m³/yard or below

This will be verified by GOTS and OCS certifications, the transactions records of fibre/yarn/fabrics, or the TENCEL lyocell certification number.

This will be verified through the ZDHC Gateway.

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.

The produced volume of wastewater is treated to the ZDHC Wastewater Guidelines.

This will be verified by reporting wastewater data through the ZDHC Gateway.²

¹ https://www.roadmaptozero.com/fileadmin/pdf/Files_2019/ZDHC_WastewaterGuidelines_V1.1_JUL19.pdf

² <https://www.roadmaptozero.com/gateway/wastewater-module>





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum.

Denim fabric will include 5% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

N/A

This will be verified by mill's fabric data sheet based on our inhouse test labs or other 3rd party lab tests on fibre content.

This will be verified by GRS/RCS certifications.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Optional: use the Jeans Redesign logo on the fabric to ship to the garment manufacturer. Provide any certification needed to validate the fabric is Guideline-compliant.

Optional: use of technology that enables sorting.

N/A



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 & Environment is deeply Ingrained in our roots, values and culture.

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 JR products will certainly help meet that benchmark.

- Shayan Abdullah, Director, Neela by Sapphire Fibres





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the fabric to the garment manufacturers, e.g. whether fabric needs caution due to special process of finish

Fabric produced in accordance with the Guidelines will be able to withstand a minimum of 30 Home Laundries (Minimum # is 30) and retain its ability to meet (Sapphire Fibres Limited Denim Division's minimum test standard for denim fabric.

Jeans produced to the Guidelines will include an easily accessible label that will include the following information.

This will be verified by:

- Dimension Stability AATCC 135
- Tensile Strength (kg) ASTM D5034
- Tear Strength (gf) ASTM D1424
- Crocking AATCC 8
- Abrasion resistance ISO 12947-2

Ensure that fabric produced is in line with the below:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying
- Optional – wash inside out

This will be verified by 3rd Party physical testing Company.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Denim fabric is free of hazardous chemicals and made with chemicals that will comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.¹

The wastewater volume created for denim fabric is a maximum of 0.025 m³/yard or below

This will be verified by GOTS/OCS Transition Certificates or GRS by Recycled Cotton.

This will be verified through the ZDHC Gateway.

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.

The produced volume of wastewater is treated to the ZDHC Wastewater Guidelines.

This will be verified by reporting wastewater data through the ZDHC Gateway.²

¹ https://www.roadmaptozero.com/fileadmin/pdf/Files_2019/ZDHC_WastewaterGuidelines_V1.1_JUL19.pdf

² <https://www.roadmaptozero.com/gateway/wastewater-module>



ELLEN
MACARTHUR
FOUNDATION



RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum.

This will be verified by Sapphire Fibres Limited Denim Division Lab which is accredited from Levi's or any third party lab.

Denim fabric will include from 5% to 20% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

This will be verified by GRS/RCS Certifications.

N/A



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Optional: use the Jeans Redesign logo on the fabric to ship to the garment manufacturer. Provide any certification needed to validate the fabric is Guideline-compliant.

Optional: use of technology that enables sorting.

N/A

N/A



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 & 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 ZDHC, CleanChain, Higg Index, GOTS/OCS, GRS, OEKO TEX STANDART100, 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.

– **Tim Huesemann, Sales Director, Tat Fung**





DURABILITY

For further details refer to the Guidelines.

Be able to withstand a minimum of 30 home laundries

Provide information on how to care for the fabric to the garment manufacturers, e.g. whether fabric needs caution due to special process of finish

Fabric produced in accordance with the Guidelines will be able to withstand a minimum of 30 Home Laundries and retain its ability to meet Tat Fung's minimum test standard for denim fabric.

Jeans produced in accordance to the Guidelines will include an easily accessible label that will include the following information.

This will be verified by:

- 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;
- Above tests can be tested in either mill's inhouse third party labs.

Ensure that fabric produced is in line with the below:

- Reduced washing frequency
- Wash at low temperatures (30 degrees C or below)
- Avoidance of tumble drying

This will be verified by mill's inhouse testing lab or third party labs.



MATERIAL HEALTH

For further details refer to the Guidelines.

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

Denim fabric is free of hazardous chemicals and made with chemicals that will comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.

The mill has implemented the ZDHC Wastewater Guidelines, including testing and reporting in accordance with the latest version of that document as a minimum.¹

The wastewater volume created for denim fabric is a maximum of 0.025 m³/yard or below

This will be verified by GOTS and/or OCS certifications from Control Union Certifications B.V.

This will be verified through the ZDHC Gateway.

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.

The wastewater volume created for denim fabric is 0.019m³/yard.

The produced volume of wastewater is treated to the specifications ZDHC Wastewater Guidelines.

This will be verified by reporting wastewater data through the ZDHC Gateway.





RECYCLABILITY

For further details refer to the Guidelines.

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

Optional: include post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).

Denim fabric composition will meet the 98% cellulosic minimum.

Denim fabric will include 5 % post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.

N/A

This will be verified by mill's fabric data sheet based on our inhouse testing labs or other third party lab tests on fibre content.

This will be verified by RCS Certification from Control Union Certifications B.V.



TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING

For further details refer to the Guidelines.

Optional: use the Jeans Redesign logo on the fabric to ship to the garment manufacturer. Provide any certification needed to validate the fabric is Guideline-compliant.

Optional: use of technology that enables sorting.

N/A

N/A



THE JEANS REDESIGN

IN SUPPORT OF THE GUIDELINES



“Jeans today are often made from complex materials and complicated structures, making it more difficult to recycle these garments. The Jeans Redesign Guidelines can help change that. The Guidelines can help the future of fashion by encouraging jeans to be made in a way that offers the potential of a second life

- either through resale, recycling or upcycling - projects that Beyond Retro are extremely passionate about. The products can also be inputted into innovative recycling projects such as our collaborations with re:newcell and Converse, expanding the potential even further. Through this, a lot more products can be fully utilised with a much longer lifespan within a more circular economy.”

Steven Bethell, President and Partner, Bank and Vogue



“Circular Systems is an innovative materials company which has developed Texloop™ technology for the upcycling and management of textile and apparel waste streams. As a textile recycler, we depend on the entire textile supply chain, including manufacturers, brands and retailers, to produce garments that our technology can recycle.

There is currently a disconnect between the efforts of recyclers & the rest of the textile supply chain. The increasing complexity of fabrics and materials excludes many garments from being recycled into acceptable qualities. To increase the amount of apparel, including jeans, that can be recycled with our Texloop™ technology, we need to begin communicating our requirements upstream and support efforts that change the way that we design jeans.

We understand the Jeans Redesign is a starting point which begins to unite the efforts of the industry. As an industry, we are running out of time to take the urgently needed collective action to address the threats to our planet. The Jeans Redesign is a first step in tackling the issues at their root cause: By creating a dialogue between the designers of jeans & the recyclers of jeans.

Jeans that are produced Guideline-compliant are an acceptable feedstock for our technologies. We call on manufacturers, brands and retailers to design their jeans Guideline-compliant.

We strongly believe that the Jeans Redesign can enable a systems-thinking approach that engages all stakeholders in the supply chain. This is the critical factor required to properly address the challenges of circularity in the denim sector, and this should be seen as a framework that can be iterated upon and optimised to extend the reach of design and manufacturing guidelines across all the other sectors of apparel, accessories and footwear. Additionally, we feel this step must be considered now, and enacted as soon as possible.”

Isaac Nicholson, CEO/Co-Founder, Circular Systems SPC



“At EVRNU we have invented an entirely new kind of engineered fiber called NuCycl made from discarded clothing. As part of our NuCycle innovation, we are calling on designers to ‘begin with the end in mind’, so that we can extend the life cycle of textile fibres. NuCycl makes it easier for the global textile industry to adopt a new model for how end-of-life clothing and unwanted textiles are managed with its garment-to-garment recycling technology.

However, today’s garment fabrics are often made from a blend of different materials which require more steps and resources to recycle. The Jeans Redesign translates our call on designers in concrete and actionable Guidelines that designers can follow. Our technology would be able to recycle the jeans produced in accordance with the Jeans Redesign Guidelines and we call on brands and retailers to get involved.”

Cheri Buell, COO, EVRNU

“The fashion industry needs an update, both its systems and values - denim is a great starting point. We all love our jeans, so let’s all wear jeans that love us back - by respecting the people who make them, and the resources from which they are made.”

Orsola de Castro, Founder and Creative Director, Fashion Revolution

“At HKRITA we support projects that take action and make a difference. The Jeans Redesign aims to do just that. Through this project we want to establish clear design guidelines, and useful production tools to make jeans more durable, sustainable and recyclable. The Jeans Redesign will enable and support our goal of a circular economy for the fashion and apparel industry. We look forward to a day soon when all jeans are made this way”

Edwin Keh, CEO, The Hong Kong Research Institute of Textile and Apparel



“The Jeans Redesign is an important milestone of Make Fashion Circular to support the circular design of jeans and ultimately all kinds of textiles. I:CO endorses this project, because the way clothes are designed from the start is critical for the efficiency of our I:CO system of textile collection, sorting, reuse and recycling and for achieving our mission to enable circular supply chains in the fashion industry.

To aid in the products’ material reutilisation, I:CO commits to investing in employee training at our global network of sorting facilities in order to gather items with the Jeans Redesign logo and provide for their reuse or recycling back into fibres for new garments.

We acknowledge that creating a circular economy for jeans requires a concerted and long-term effort from all stakeholders. With our early commitment, we want to pave the way for a critical mass of circular products to be collected and recycled through our I:CO take-back system. Therefore, we call for all brands and retailers to follow and start designing their jeans according to these important Guidelines.”

Axel Buchholz, CEO, I:CO

“At Infinited we have developed a technology that can recover all cellulosic fibres from garments. As a recycler we depend on brands to design clothing in a way that can be recycled efficiently. In reality, fabrics are increasingly made from multiple different materials which makes it more challenging and increases the costs to recycle most of them. Especially the amount of elastane poses a real challenge on recyclability.

The Jeans Redesign tackles the issue at its root cause, by connecting the design with available recycling technologies. Our technology would be able to recycle all the jeans produced in accordance with the Jeans Redesign Guidelines and we call on brands and retailers to get involved.”

Petri Alava, CEO, Infinited Fiber Company



“As a cellulosic fibre producer and recycler we strongly believe in collaboration between brands and the textile value chain as being key to bringing innovation and biobased materials to the consumers. Creating jeans that are made from biobased raw materials with an end of life purpose fits our TENCEL™ fibres sustainability vision and our understanding of circular economy. Therefore we see the Jeans Redesign Guidelines as an important first step towards closing the loop in the textile industry. We are pleased to be part of the Guidelines’ evolution.”

Tricia Carey, Director Global Business Development for Denim, Lenzing

“We fully endorse the Jeans Redesign because it gets at a simple root cause for why almost no fashion is circular today; when we don’t make clothes that can be recycled, there won’t be any recycled clothes. For us as recyclers of natural fashion materials, complex blended fabrics that contain unsafe chemicals are as single-use as a plastic straw. We call on all manufacturers and brands to design their jeans in compliance with the Jeans Redesign Guidelines, and we commit to recycling 100% of such products once they can no longer be worn.”

Mattias Jonsson, CEO, re:newcell

“At Recover, as both a recycler and manufacturer of recycled yarns, we want to contribute to scaling the high-value recycling of post-consumer garments in the market. To be able to do so we depend on brands and retailers to produce garments that contain recycled content and are designed to be recycled. The Jeans Redesign is a fantastic starting point to increase both the availability of good feedstock into our recycling plants as well as the demand for post- consumer recycled content.”

Alfredo Ferre, CEO, Recover



“Today, the vast majority of garments that cannot be reused are downcycled into low value applications, like rags, mattress stuffing and insulation. Designing for durability and recyclability, as set out in the Guidelines, marks a pivotal change in the industry. Jeans designed this way will remain at a higher quality making them particularly attractive for local resale, but also for recycling and upcycling, when they can no longer be worn. Collaboration is essential. As a collector and sorter, we cannot create the circular economy for fashion alone. We are calling manufacturers, brands and retailers to follow the Jeans Redesign Guidelines to help us ensure the clothes they produce and sell never become waste.”

Martin Bösch, CEO, TEXAID

“Textile Exchange believes circularity is integral to the future of fashion and we are proud to work with the Ellen MacArthur Foundation on the Jeans Redesign. Textile Exchange’s mission is to accelerate the uptake of preferred fibres and materials, and the Jeans Redesign Guidelines align with that goal in key ways: requiring the use of organic cotton or in-transition cotton, suggesting the use of recycled content, and ensuring production without the use of potentially hazardous finishes and dyes. Textile Exchange knows that true industry transformation is only possible through a collaborative approach and we encourage brands and manufacturers to commit to using the Jeans Redesign Guidelines.”

La Rhea Pepper, Managing Director, Textile Exchange

“Designing apparel for recyclability will be a game-changer for the planet. By creating common standards and removing uncertainties in the content of denim, the Jeans Redesign will lower the cost of circularity by helping optimise recycling processes.

While Tyton’s solution can effectively recover polyester and cotton at any ratio in apparel, the addition of elastane to blends has been growing – this poses both technical and cost challenges for all recycling technologies. This leading effort to consider the relevant factors for recycling at the design stage is a model that we at Tyton would like to see replicated for other apparel categories.”

Peter Majeranowski, CEO, Tyton BioSciences LLC



“As recyclers, we need brands and retailers to produce clothes that our technology can process. But the increasing number of fibre types used in clothing generally, and the elastane in jeans particularly, means many garments will never be recycled. To change this we must change the way jeans are designed and made. The Jeans Redesign addresses this, by connecting design with today’s recycling technology, helping ensure that at the end of their life old jeans can be used by more brands to make new jeans.

We hope that the Guidelines lead to wider acceptance and use of post-consumer recycled content by brands and retailers.”

Kimberley van der Wal, Business Development Manager, Wolkat

“We’re excited to see the Jeans Redesign as it exemplifies a real and tangible step towards a circular flow of resources for the textile industry. As a polymer recycling technology designed to take in pure and blended polyester and cotton/cellulose, designing mono fibre products isn’t necessary for our process. However, focusing designer’s minds on optimal materials for achieving ‘100% circular’ will only improve the yield of the raw materials which can be recirculated in industrial processes of the future while reducing waste in the form of other non-recyclable materials.”

Cyndi Rhoades, Founder CEO, Worn Again Technologies



ABOUT MAKE FASHION CIRCULAR

Make Fashion Circular was launched by UK charity the Ellen MacArthur Foundation at the Copenhagen Fashion Summit in 2018. The initiative brings together leaders from across the fashion industry, including designers, brands, cities, philanthropists, NGOs, and innovators. Make Fashion Circular is heading up international efforts to stop waste and pollution in fashion by creating a circular economy for the industry, in which clothes are made from safe and renewable materials, new business models increase their use, and used clothes are turned into new ones.

To make fashion circular, businesses, governments, innovators, and citizens need to join forces. Make Fashion Circular brings together industry leaders including Burberry, Gap Inc., H&M, HSBC, Inditex, PVH, and Stella McCartney as Core Partners. Make Fashion Circular is supported by Philanthropic Partners Laudes Foundation, MAVA Foundation, and players of People's Postcode Lottery.





CORE PARTNERS



PHILANTHROPIC PARTNERS

