DISCLAIMER

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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*
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 40 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 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 430,000 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
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.
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 time 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.**

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

Substances of concern that enter the production process often remain in textiles. 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. Some of the chemicals used can persist in the environment and may accumulate over time.

Cotton production uses 2.5% of the world’s arable land, but accounts for 16% of all pesticides used; in India 50% of all pesticides are used for cotton production. 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.

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. 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:

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

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

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

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

INFORMATION THAT CONFIRMS EACH ELEMENT OF THE GUIDELINE REQUIREMENTS HAS BEEN MET SHOULD BE MADE EASILY AVAILABLE

ORGANISATIONS THAT MEET THE REQUIREMENTS WILL BE GRANTED PERMISSION TO USE THE JEANS REDESIGN LOGO ON JEANS PRODUCED IN LINE WITH THE GUIDELINES

JEANS REDESIGN LOGO USE WILL BE REASSESSED ANNUALLY, BASED ON COMPLIANCE WITH REPORTING REQUIREMENTS
THE JEANS REDESIGN
PARTICIPANT SPECIFICATIONS
<table>
<thead>
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<th>ORGANISATION</th>
<th>PAGE</th>
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<td>Arvind Limited</td>
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<tr>
<td>Bestseller</td>
<td>17</td>
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<tr>
<td>Boyish Jeans</td>
<td>20</td>
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<tr>
<td>C&amp;A</td>
<td>23</td>
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<td>GAP</td>
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<td>HIRDARAMANI</td>
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<td>HNST</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kipas</td>
<td>38</td>
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<td>Lee®</td>
<td>41</td>
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<tr>
<td>MUD Jeans</td>
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<td>Outerknown</td>
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<td>Reformation</td>
<td>50</td>
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<tr>
<td>SAITEX</td>
<td>53</td>
</tr>
<tr>
<td>Tommy Hilfiger</td>
<td>56</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Be able to withstand a minimum of 30 home laundries</th>
<th>Provide information on how to care for the jeans visibly on the garment</th>
</tr>
</thead>
</table>

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 13934-2
- 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.

<table>
<thead>
<tr>
<th>Source cellulose-based fibres from regenerative farming, organic or transitional methods.</th>
<th>Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.</th>
<th>In addition, the use of the following chemicals or processes is prohibited:</th>
</tr>
</thead>
</table>
| 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. | a. Conventional electroplating  
b. Potassium Permanganate  
c. Stone finishing  
d. Sand blasting  
e. [Optional - Insert additional] |

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.

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

# Traceability: Enable Easy Sorting for Recycling
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Use Jeans Redesign logo</th>
<th>Optional: use of technology that enables sorting.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N/A</td>
</tr>
</tbody>
</table>
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

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.

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 valid third party test institute.

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**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 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.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Option 1</th>
<th>Option 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include a minimum of 98% cellulose-based fibres by weight in total textile composition.</td>
<td>Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.</td>
<td>Metal rivets will be removed entirely or reduced to a minimum.</td>
</tr>
<tr>
<td>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.</td>
<td>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.</td>
<td>Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).</td>
</tr>
</tbody>
</table>

*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.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Option 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Jeans Redesign logo</td>
<td>Optional: use of technology that enables sorting.</td>
</tr>
</tbody>
</table>

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 USA and European wholesale accounts.”

- Jordan Nodarse, Creative Director, Boyish Jeans
### DURABILITY
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Be able to withstand a minimum of 30 home laundries</th>
<th>Provide information on how to care for the jeans visibly on the garment</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Information on reducing washing frequency</td>
</tr>
<tr>
<td>• Instructions to wash at low temperatures (30 degrees of below)</td>
</tr>
<tr>
<td>• Instructions to avoid tumble drying</td>
</tr>
</tbody>
</table>

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

### MATERIAL HEALTH
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Source cellulose-based fibres from regenerative farming, organic or transitional methods.</th>
<th>Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.</th>
<th>In addition, the use of the following chemicals or processes is prohibited:</th>
</tr>
</thead>
<tbody>
<tr>
<td>This will be verified by Lenzing certified for Refibra lyocell, GRS certified for recycled content, and OCS certified for organic cotton.</td>
<td>This will be verified through the ZDHC Gateway.</td>
<td>a. Conventional electroplating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Potassium Permanganate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Stone finishing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Sand blasting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>e. No hypochloride, use of neutral based cold water enzymes blue sign certified through Nearchimica</td>
</tr>
</tbody>
</table>

This will be verified through the ZDHC Gateway.

<table>
<thead>
<tr>
<th>e. [Optional - Insert additional]</th>
</tr>
</thead>
</table>

This will be verified by EIM Score, OEKO TEX and GOTS.
# RECYCLABILITY
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Option</th>
<th>Additional Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include a minimum of 98% cellulose-based fibres by weight in total textile composition.</td>
<td>Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.</td>
<td>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.).</td>
</tr>
</tbody>
</table>

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.

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 & BACL.

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

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# TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Jeans Redesign logo</td>
<td>Optional: use of technology that enables sorting.</td>
</tr>
</tbody>
</table>

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 at C&A
**DURABILITY**
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Be able to withstand a minimum of 30 home laundries</th>
<th>Provide information on how to care for the jeans visibly on the garment</th>
</tr>
</thead>
</table>

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 of 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:
|---|---|---|
| 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. | a. Conventional electroplating  
| In addition, the use of the following chemicals or processes is prohibited: |  
|   a. Conventional electroplating | b. Potassium Permanganate  
|   b. Potassium Permanganate | c. Stone finishing  
|   c. Stone finishing | d. Sand blasting  
|   d. Sand blasting | e. [Optional - Insert additional]  
|   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.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Goal</th>
<th>Verification Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include a minimum of 98% cellulose-based fibres by weight in total textile composition.</td>
<td>Metal rivets will be removed entirely or reduced to a minimum.</td>
<td>The jeans will include metal trims and C&amp;A confirms it is easy to remove by performing the following: cutting out.</td>
</tr>
<tr>
<td>Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.</td>
<td>Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).</td>
<td></td>
</tr>
</tbody>
</table>

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

---

### Traceability: Enable Easy Sorting for Recycling

For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Goal</th>
<th>Verification Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Jeans Redesign logo</td>
<td>Optional: use of technology that enables sorting.</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A
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 honor 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

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)

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 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.

This will be verified by use of certified organic fibres (Global Organic Textile Standard (GOTS) Organic Content Standard (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:
- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- Sand blasting
- [Optional - Insert additional]

This will be verified through the ZDHC Gateway, Jeanologia EIM system and GAP Inc. Sand Blasting Policy, which bans sandblasting.
## RECYCLABILITY
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Include a minimum of 98% cellulose-based fibres by weight in total textile composition.</th>
<th>Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.</th>
<th>Metal rivets will be removed entirely or reduced to a minimum.</th>
<th>Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).</th>
</tr>
</thead>
<tbody>
<tr>
<td>This will be verified by fibre composition disclosed on Care and Content label.</td>
<td>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)).</td>
<td>N/A</td>
<td>The Jeans will include trims and the Organisation confirms it is easy to remove by pre-processing for recycling.</td>
</tr>
</tbody>
</table>

## TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Use Jeans Redesign logo</th>
<th>Optional: use of technology that enables sorting.</th>
<th>N/A</th>
</tr>
</thead>
</table>
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

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.

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

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

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:
- Conventional Electroplating: for this project we are only using metal trims in their natural raw metal color (weekday = stainless steel, H&M = aluminum). That means, no plating (neither eco or conventional, or oxidation) is used.
- Potassium Permanganate: We can show the wash recipe of what we are using.
- Stone finish: We can show the wash recipe of what we are using.
- 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.

<table>
<thead>
<tr>
<th>Include a minimum of 98% cellulose-based fibres by weight in total textile composition.</th>
<th>Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.</th>
<th>Metal rivets will be removed entirely or reduced to a minimum.</th>
<th>Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material composition will meet the 98% cellulose minimum. This will be verified by <strong>Content analysis testing method: Deviation of fibre content ISO1833.</strong></td>
<td>Jeans will include tbc % post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition. This will be verified by <strong>GRS (Global Recycled Standard) and RCS (Recycle Claim Standard).</strong></td>
<td>The Jeans will include [metal trims] and the Organisation confirms it is easy to remove by performing the following: I:CO &amp; Renewcell 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.</td>
<td></td>
</tr>
</tbody>
</table>

### TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Use Jeans Redesign logo</th>
<th>Optional: use of technology that enables sorting.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
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 focused 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

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.

This will be verified by: Tearing, Tensile, Abrasion, Seam Slippage, Stretch and recovery (Testing method – USA – AATCC, EU – ASTM & ISO)
- 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

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

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.

This will be verified by OCS, RCS, GOTS certificates.

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 and the Oeko-Tex certification (raw material and washing plants).

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 Jeanologia review of EIM scores (Environmental Impact Measurement).
### RECYCLABILITY
For further details refer to the Guidelines.

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

Material composition will meet the 98% cellulosic minimum. This will be verified by composition test.

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.

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.

<table>
<thead>
<tr>
<th>Use Jeans Redesign logo</th>
<th>Optional: use of technology that enables sorting.</th>
</tr>
</thead>
</table>

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

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
- Tear strength – ISO 13937-1:2000
- Wrinkle recover – ISO 9867:2009(E)
- Colour fastness test for washing with soap – ISO 105-C10:2006

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 of below)
- Instructions to avoid tumble drying
- **Instructions to avoid bleaching**
- **Instructions to avoid dry cleaning**
- **Instructions to use the specially developed pro-biotic spray to avoid washing**

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:

a. Conventional electropolating
b. Potassium Permanganate
c. Stone finishing
d. Sand blasting
e. **Chlorine bleaching**
f. PVC free silkscreen print

Additionally, recycled fibres are tested in independent laboratoria. 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.

e. Chlorine bleaching
f. PVC free silkscreen print

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.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include a minimum of 98% cellulose-based fibres by weight in total textile composition.</td>
<td>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).</td>
</tr>
<tr>
<td>Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.</td>
<td></td>
</tr>
<tr>
<td>Metal rivets will be removed entirely or reduced to a minimum.</td>
<td>Jeans are designed rivet-free.</td>
</tr>
<tr>
<td>Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).</td>
<td>The Jeans will include removable and replaceable buttons and the Organisation confirms it is easy to remove by performing the following: unscrewing the button.</td>
</tr>
</tbody>
</table>

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.

### TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Jeans Redesign logo</td>
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</tr>
</tbody>
</table>

N/A
Kipaş Textiles is a sustainable yarn, fabric and denim mill with 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 35 years of experience, 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 sustainable yarn, fabric and denim 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 fibres. Our products meet with the highest requirements of standards and independent certification organisations 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, Kipaş’s recycled ‘Denim by Denim’ fabrics are produced with zero water and zero chemicals. In addition, Kipaş adds at least 5% post-consumer recycled cotton to all its new developed fabrics including denim. Starting from FW20/21 we will increase the percentage gradually up to 25% in 2025. By constantly optimizing our operations, setting ambitious targets, and by seeking innovative solutions and collaborations across the whole value chain.

“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. Kipas is honoured to participate in the Ellen MacArthur Foundation’s Jeans Redesign and contribute to a circular economy. Starting from FW20/21, Kipas will increase the percentage of post-consumer cotton from 5% gradually up to 25% in 2025. By constantly optimising our operations, by seeking innovative solutions and collaborations across the whole value chain.”

– Halit Gümüşer, Member of Board Kipas Textiles
## DURABILITY
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Be able to withstand a minimum of 30 home laundries</th>
<th>Provide information on how to care for the jeans visibly on the garment</th>
</tr>
</thead>
</table>

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: ASTMD 5034
- Tear strength test: ASTMD 1424
- Shrinkage test: ISO 6330
- Abrasion test: 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
- 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.

<table>
<thead>
<tr>
<th>Source cellulose-based fibres from regenerative farming, organic or transitional methods.</th>
<th>Jeans are made with chemicals that comply with Level 1 Zero Discharge of Hazardous Chemicals (ZDHC) manufacturing restricted substance list (MRSL) as a minimum.</th>
<th>In addition, the use of the following chemicals or processes is prohibited:</th>
</tr>
</thead>
</table>
| This will be verified by GOTS and/or OCS certifications. | This will be verified through the ZDHC Gateway. | a. Conventional electroplating  
  b. Potassium Permanganate  
  c. Stone finishing  
  d. Sand blasting  
  e. [Optional - Insert additional]

- e. Chemicals compliant with REACH

This will be verified by EIM Jeanologica.
<table>
<thead>
<tr>
<th><strong>RECYCLABILITY</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Include a minimum of 98% cellulose-based fibres by weight in total textile composition.</td>
<td>Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.</td>
</tr>
</tbody>
</table>

Material composition will meet the 98% cellulose minimum. This will be verified by fibre content analysis test method. 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. N/A Jeans will include easy removable buttons.

<table>
<thead>
<tr>
<th><strong>TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Jeans Redesign logo</td>
<td>Optional: use of technology that enables sorting.</td>
</tr>
</tbody>
</table>

N/A However, Kipas 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.
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
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 Lee’s minimum test standard for jeans.

This will be verified by:

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 of 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 (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 through the ZDHC Gateway.

Optional - Insert additional

This will be verified by the manufacturer, Kontoor Brands Compliance and Sourcing teams, third party auditors.
**RECYCLABILITY**
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Include a minimum of 98% cellulose-based fibres by weight in total textile composition.</th>
<th>Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.</th>
<th>Metal rivets will be removed entirely or reduced to a minimum.</th>
<th>Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).</th>
</tr>
</thead>
<tbody>
<tr>
<td>This will be verified by the mill, Kontoor Brands Global Sustainable Business team, third party auditors.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING**
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Use Jeans Redesign logo</th>
<th>Optional: use of technology that enables sorting.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
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

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

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 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:
- Conventional electroplating
- Potassium Permanganate
- Stone finishing
- 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.

<table>
<thead>
<tr>
<th>Include a minimum of 98% cellulose-based fibres by weight in total textile composition.</th>
<th>Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.</th>
<th>Metal rivets will be removed entirely or reduced to a minimum.</th>
<th>Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).</th>
</tr>
</thead>
<tbody>
<tr>
<td>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).</td>
<td>Jeans will include <strong>23% post-consumer recycled content (PCRC)</strong> on average (by weight) of the total fabric composition. This will be verified by fibre composition and Global Recycled Standard (GRS).</td>
<td>N/A</td>
<td>The jeans will include <strong>recyclable stainless steel buttons and rivets</strong>. MUD Jeans confirms it is easy to remove by performing the following technique: mechanical cutting.</td>
</tr>
</tbody>
</table>

# Traceability: Enable Easy Sorting for Recycling
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Use Jeans Redesign logo</th>
<th>Optional: use of technology that enables sorting.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
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’s 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 of 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
  e. [Optional - Insert additional] |

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.

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

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

## Traceability: Enable Easy Sorting for Recycling

For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Jeans Redesign logo</td>
<td>Optional: use of technology that enables sorting.</td>
</tr>
</tbody>
</table>

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

Provided 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)
- Colourfastness to Laundering (AATCC 61)

Testing firms available include Intertek, BACL and in house testing facilities.

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 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 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.

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

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

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**TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING**
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Reference (by weight)</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Jeans Redesign logo</td>
<td></td>
<td>Optional: use of technology that enables sorting.</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Be able to withstand a minimum of 30 home laundries</th>
<th>Provide information on how to care for the jeans visibly on the garment</th>
</tr>
</thead>
<tbody>
<tr>
<td>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:</td>
<td></td>
</tr>
<tr>
<td>● Dimensional changes of garments after home laundering (AATCC 150)</td>
<td></td>
</tr>
<tr>
<td>● Pilling after home laundering (ASTM D4970)</td>
<td></td>
</tr>
<tr>
<td>● Determining steam twist in garments</td>
<td></td>
</tr>
<tr>
<td>● Breaking strength of textile fabrics: grab test (ASTM D5034)</td>
<td></td>
</tr>
<tr>
<td>● Tearing strength: Elmendorf apparatus (ASTM D1424-09)</td>
<td></td>
</tr>
<tr>
<td>● Failure in sewn seams: woven fabrics (ASTM D1683-17)</td>
<td></td>
</tr>
<tr>
<td>● Attachment strength of trims (16 CFR 1500.53)</td>
<td></td>
</tr>
<tr>
<td>● Pocket strength (TPDD-00004)</td>
<td></td>
</tr>
<tr>
<td>● Colourfastness to actual laundering (AATCC 124)</td>
<td></td>
</tr>
<tr>
<td>Jeans produced in accordance with the Guidelines will include an easily accessible label that will include the following information:</td>
<td></td>
</tr>
<tr>
<td>● Information on reducing washing frequency</td>
<td></td>
</tr>
<tr>
<td>● Instructions to wash at low temperatures (30 degrees of below)</td>
<td></td>
</tr>
<tr>
<td>● Instructions to avoid tumble drying</td>
<td></td>
</tr>
<tr>
<td>This will be verified by Bureau Veritas.</td>
<td></td>
</tr>
</tbody>
</table>

### MATERIAL HEALTH
For further details refer to the Guidelines.

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

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Verification Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include a minimum of 98% cellulose-based fibres by weight in total textile composition.</td>
<td>This will be verified by Bureau Veritas,</td>
</tr>
<tr>
<td>Optional: include x% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.</td>
<td>This will be verified by Global Recycled Standard (GRS)</td>
</tr>
<tr>
<td>Metal rivets will be removed entirely or reduced to a minimum.</td>
<td>N/A</td>
</tr>
<tr>
<td>Enable easy disassembly of any additional material that is added to the fabric (metals, radio-frequency identification (RFID), etc.).</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Optional: use of technology that enables sorting.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Jeans Redesign logo</td>
<td></td>
</tr>
</tbody>
</table>

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.
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.

<table>
<thead>
<tr>
<th>Be able to withstand a minimum of 30 home laundries</th>
<th>Provide information on how to care for the jeans visibly on the garment</th>
</tr>
</thead>
</table>

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

**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 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.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Percentage</th>
<th>Optional:</th>
<th>Metal Rivets</th>
<th>Enable Easy Disassembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include a minimum of 98% cellulose-based fibres by weight in total textile composition.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Optional: include 0% post-consumer recycled content (PCRC) on average (by weight) of the total fabric composition.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Weight of all components of denim garment will be verified by accredited QA 3rd party test labs.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### TRACEABILITY: ENABLE EASY SORTING FOR RECYCLING
For further details refer to the Guidelines.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Optional:</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Jeans Redesign logo</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Optional: use of technology that enables sorting.</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
“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 Nichelson, 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 Böschen, 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, NIKE Inc., and Stella McCartney as Core Partners. Make Fashion Circular is supported by Philanthropic Partners C&A Foundation, MAVA Foundation, and players of People’s Postcode Lottery.
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