

The background of the image is a rustic wooden surface with several spools of thread. One large spool of blue thread is at the top right, and several smaller spools of blue and brown thread are on the left. On the right side, there are three pieces of fabric: a blue tweed fabric at the top, a grey and white tweed fabric in the middle, and a blue and white tweed fabric at the bottom. The text 'Revolutionary' is in a large, bold, white font, and 'by camira' is in a smaller, lowercase, white font below it. A yellow curved arrow points from the top of the word 'Revolutionary' down to the 'y' in 'camira'.

Revolutionary

by **camira**

What you need to know

camira

Why have we launched Revolutionary by Camira?

The textile industry is responsible for a huge amount of waste – globally, an estimated 92 million tons is created each year (Source: UCL), while just 1% of material used to produce clothing is recycled into new clothing (Source: Ellen MacArthur Foundation). Even though we are a zero to landfill company, inevitably we create textile waste from our own manufacturing, notably yarn remnants, fabric selvages and sometimes off-quality fabric.

We knew we needed to be part of the solution to this waste problem, and in 2022 we invested in iinouio, a state-of-the-art textile recycling capability. Our aim in doing this was to achieve true circularity within our own design and manufacturing processes, recycling the unavoidable waste that is generated during the production of our fabrics - and creating a range of closed loop fabrics - the first of which is Revolutionary by Camira.

What is iinouio?

A textile recycling capability which specialises in wool and cashmere, iinouio became part of Camira Group in 2022 and is located in Camira Yarns in Huddersfield, England. iinouio is an acronym for 'it is never over until it is over', this textile reprocessing line converts high value raw materials - from textile manufacturing waste and preloved wool and cashmere products - back into fibre which can then be re-spun into new yarn to make new fabric. The machinery provides wool recycling opportunities for retailers and other textile manufacturers, as well enabling us to develop our own range of recycled wool fabrics.

What makes Revolutionary by Camira different to other recycled wool fabrics on the market?

While there are other fabrics that contain recycled wool, Revolutionary by Camira is unique in that it contains our own waste that is not just reused, it is waste that we change the fundamental state of. In this case we process yarn back into fiber - to give it an entirely new lease of life.

Other textile companies typically recycle waste from other sources, rather than their own, or they reuse waste fibers that are generated during the manufacturing process simply putting them back into the beginning of the process (e.g. carded wool waste).

Another key differentiator is that each shade in the Revolutionary by Camira color palette has been developed with the original coloration of the recycled woollen fibers as its base. This innovative method of color curation virtually eliminates the concept of dyeing, reducing the use of chemical dye stuffs, and celebrating the beauty of both recycled yarn and color.





Evolve

Realise

Origin

Bloom

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Reform



How much recycled content does Revolutionary by Camira contain?

Revolutionary by Camira contains 31% recycled content which is all derived from the yarn remnants left over from manufacturing our transport fabrics which are worsted wool with a small amount of polyamide. The actual composition is 26% recycled wool, 5% recycled polyamide, 65% virgin wool and 4% virgin polyamide.

Where is Revolutionary by Camira made?

Revolutionary by Camira is made in our Yorkshire manufacturing sites; the waste recycling and yarn spinning takes place at Camira Yarns, and the weaving and finishing is at our Meltham and Holmfirth facilities.

Will there be any appearance variations due to the recycled content in the fabric?

The 31% recycled content of Revolutionary by Camira means a broader view needs to be taken in terms of tolerance levels between batches and also natural visible characteristics - these features are part of the natural charm of the fabric. A wider color tolerance is also required between batches due to the base recycled fiber being derived from variable dye lots. It is not comparable to dyeing a standard yarn.

How is the Revolutionary by Camira yarn made?

Each shade in the Revolutionary by Camira color palette has been developed using the original colors of the recycled woollen fibers. The waste wool/nylon yarn is sorted and separated into color groups.

The yarn is then cut into shorter pieces and is then pulled back into fibers by the inouiiio machinery; this involves very fast, very sharp rotating spikes pulling the yarn apart and opening it up into fibres, so that they can be reprocessed. The flecks that are evident are the yarn fibres that haven't been fully opened up.

The recycled wool fibers are compressed into bales, ready to be blended with virgin wool fibers. Once blended, the fibers are carded (this means the individual



What are the colored flecks that I can see on Revolutionary by Camira?

The waste wool yarn creates flecks of color which float on and within the fabric, sometimes referred to as neeps. The number and visibility of neeps vary according to the color of the base cloth. For example, the neeps may be more evident on lighter base shades – but these must be seen as integral to the characteristics of the product rather than a quality concern. In darker base shades it is harder to identify the flecks.

Here's an image showing the characteristics on the finished fabric:



What is the environmental benefit of using recycled wool as opposed to virgin?

We have undertaken lifecycle assessment of the Revolution fabric with Huddersfield University's School of Applied Sciences. Results show that using recycled wool content reduces all major LCA impact categories (Global Warming Potential, Abiotic Depletion (fossil fuels) and Water Depletion). Using 26% recycled wool reduces these impacts by 28%, 57% and 70% respectively. These indicators would be reduced further by increasing the amount of recycled wool.





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