

Why have we launched Revolution?

The textile industry is responsible for a huge amount of waste – globally, an estimated 92 million tonnes 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 selvedges 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 iinouiio, 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 Revolution.

What is iinouiio?

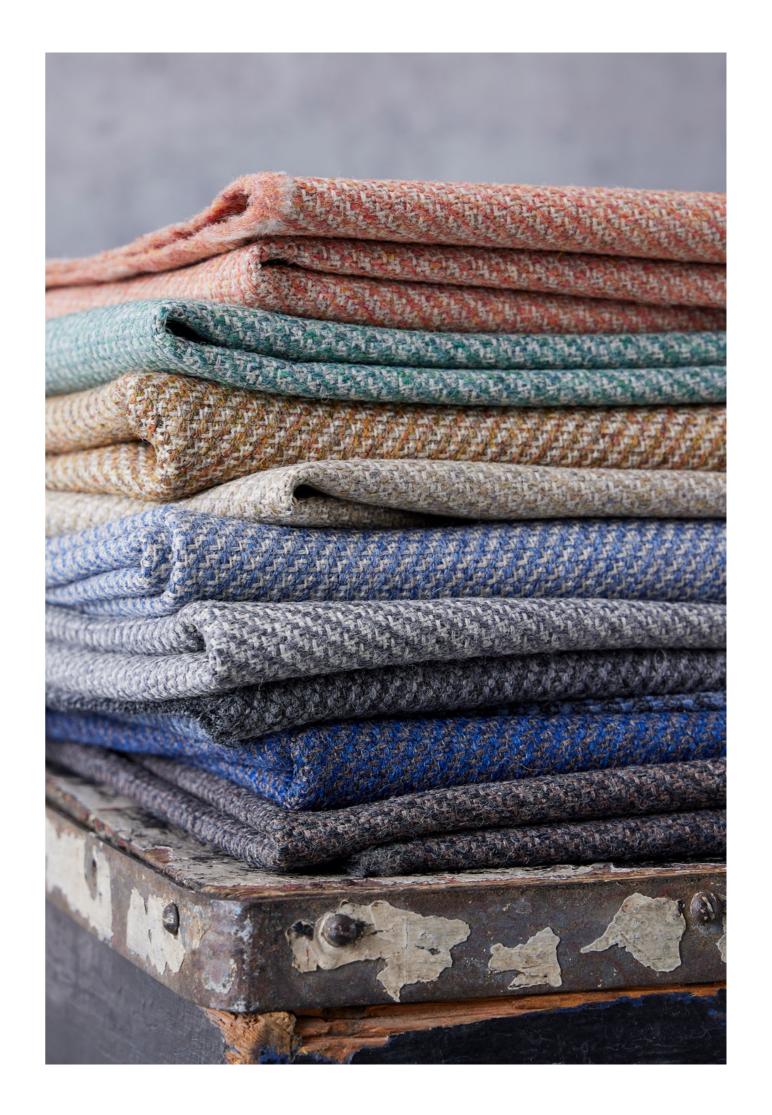
A textile recycling capability which specialises in wool and cashmere, iinouiio became part of Camira Group in 2022 and is located in Camira Yarns in Huddersfield, England. linouiio is an acronym for 'it is never over until it is over', this textile reprocessing line converts high value raw materials - 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 Revolution different to other recycled wool fabrics on the market?

While there are other fabrics that contain recycled wool, Revolution 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 fibre - 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 fibres 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 Revolution colour palette has been developed with the original colouration of the recycled woollen fibres as its base. This innovative method of colour curation virtually eliminates the concept of dyeing, reducing the use of chemical dye stuffs, and celebrating the beauty of both recycled yarn and colour.







How much recycled content does Revolution contain?

Revolution 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 Revolution made?

Revolution 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 Revolution 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 colour tolerance is also required between batches due to the base recycled fibre being derived from variable dye lots. It is not comparable to dyeing a standard yarn.

How is Revolution yarn made?

Each shade in the Revolution colour palette has been developed using the original colours of the recycled woollen fibres. The waste wool/nylon yarn is sorted and separated into colour groups.

The yarn is then cut into shorter pieces and is then pulled back into fibres by the iinouiio 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 fibres are compressed into bales, ready to be blended with virgin wool fibres. Once blended, the fibres are carded (this means the individual fibres are combed and straightened to create a web or sliver). The carded fibres are then spun and twisted into yarn ready for weaving at Meltham.



What are the coloured flecks that I can see on Revolution?

The waste wool yarn creates flecks of colour which float on and within the fabric, sometimes referred to as neps. The number and visibility of neps vary according to the colour of the base cloth. For example, the neps 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.



