

Questions from Director-e ahead of their Jan/Feb edition on *New development in technology*

1. Bearing in mind that this feature covers fabric, fibres, equipment and machinery, what are the newest innovations in these areas and how did they develop?

Worn Again Technologies has developed a pioneering polymer recycling technology which has the potential to recycle up to 80% of all textiles, globally – an exponential increase from the current 1%.

The technology itself is able to recapture raw materials from end of use polyester and cotton textiles and use them as input for new clothing. Not only does this go a huge way towards solving part of the world's plastic crisis and growing problem of textile waste to landfill, it helps prevent the need to produce new raw materials and the damage being done to our environment from this.

This trailblazing company was founded by Cyndi Rhoades in 2005 with a vision to be part of the solution to eradicate waste. The company quickly evolved from our beginnings in upcycling to seeking a method to recycle at a molecular level. Working with Dr Adam Walker and a team of world-class scientists alongside the support of partners such as Sulzer Chemtech, Ellen MacArthur Foundation (member of CE100) and world-renowned brands such as H&M and Kering, who each share a circular vision of the future, Worn Again Technologies is revolutionising the sustainability of the fashion and textile industry.

2. What has made these innovations stand out within the industry?

The Worn Again Technologies process can take in non-reusable textiles as inputs and regenerates both PET and cellulose (from cotton) which gives us a clear commercial advantage over other technologies in the industry. As our process means we can take in a considerably higher proportion of feedstock, this reduces the average cost of inputs as well as producing two economically viable outputs to the market. These outputs will be sold at a price which is comparable to, if not less than, its virgin derived counterparts preventing the need to pass on a premium to customers.

3. What trends have you noticed as of late in the market - is there an interest in the technology behind fibres or the uses of new machinery for example?

We are really beginning to see brands taking notice and listening to consumers demands for sustainable alternatives. In recent years many brands such as H&M and Marks and Spencer have made clear global commitments to using sustainable materials

in their clothing showing significant steps towards the sustainability of the fashion industry and ultimately, a waste free world.

4. What would you say are the top three factors of importance when creating new technology or sourcing new equipment?

For Worn Again Technologies the three most important factors when creating our technology were that, the outputs were of virgin equivalent quality, the process was environmentally friendly and that the outputs will be cost competitive to the virgin raw materials currently used by brands.