Lenzing has introduced Seamless, which combines its Tencel fibre with a new construction technique that it says promises garments with high levels of comfort.

Seamless dreams

Austrian fibre manufacturer Lenzing used the Outdoor Retailer Summer Market exhibition in Salt Lake City in August to present Tencel Seamless Technology, which combines its Tencel fibre with a construction technique that it says "creates exceptionally comfortable performance garments".

Tencel is already well known across the performance and sports apparel sector for offering a high level of moisture management, made possible by submicroscopic canals between the individual fibrils that regulate the absorption and release of moisture. Lenzing describes it as "a versatile companion to other performance fibres", while its skin-friendly properties result in frictionless fabrics that don't cause irritation or inhibit movement.

All the Austrian company said initially about the construction methodology was that it produces functional, smooth garments without the chafing or constraint that can come from seams. Tencel seamless garments can be designed for specific sports uses, understanding athletes' movements and the demands they put on their clothing, the company continued. Yarn blends can be tailored for physical conditions and garments can be created with the required dimensions and specifications for the particular activity.

In a more detailed conversation about the launch, project manager for active sportswear, Andreas Gürtler, says this understanding of what athletes need from fabrics and garments has been of great importance. He explains that tests with top athletes at the University of Graz have helped his company understand the benefits of different fibre combinations, and that fabric containing 66% polyester and 34% Tencel had proved to be the best bet for Lenzing Seamless. It has the fast drying functionality of polyester combined with the temperature balance and soft, natural hand of Tencel.

He mentions a polo shirt that Austrian sports brand Löffler has introduced, ideal for golf, with the polyester moving moisture towards the outside, where Tencel can absorb it, evaporating it over time while the skin stays dry. "It's a good combination for comfort," says Mr Gürtler. "It compares well with wool. In fact, at 65% humidity, Tencel absorbs more moisture than



Runners at an event at Lake Constance in May said a top made using Lenzing Seamless was the most comfortable they had ever worn.

E.Grebe/Lenzing

COPYRIGHT

wool. It holds its colour because it only takes the dye it needs and the dye goes right into the fabric. We've done tests on this with Huntsman Chemical and this quality means you can save 50% on dyestuffs and 50% on energy in the dyeing process."

He puts forward the idea that Tencel Seamless can be a good alternative to using 100% synthetics and that it will go down well with sports enthusiasts who want the comfort levels it can offer with a proportion of natural fibre content. At the end of May, 3,500 women runners took part in a race at Lake Constance wearing shirts made from the same combination of polyester and Tencel, with many describing them as the best they had ever worn and insisting on keeping them to use again. Andreas Gürtler says the findings of tests Lenzing had been carrying out all went into those garments and that the manufacturer of the finished product, a company called Brubeck, Austrian-owned, but carrying out its manufacturing of high-end sports clothing in Poland, was delighted with the result. It is pushing seamless technology enthusiastically, saying that although traditionally seamless has been a term associated with socks and underwear, it feels advances in technology and yarns have enabled the same three-dimensional knitting technology to be used to produce far larger and more intricate designs, giving birth to what it calls a whole new branch of technological clothing. One of the projects it has worked on is a baselayer collection for the Polish national biathlon team, which includes Olympic silver medallist Tomasz Sikora.



Seamless used to be associated with socks and underwear, but technological advances have made it possible for manufacturers to use it to make larger garments.

E.Grebe/Lenzing

"So we feel Seamless is already a success," Mr Gürtler concludes. "The only problem is that there are not too many seamless producers at the moment. Our belief is that the numbers will expand in the next five years and that it will not be too long before some of the big names follow. This market has been dominated by polyester and cotton and it's fair to say there was some resistance to Tencel at first. But now it's really taking off."

Development work will continue. By the time of the Outdoor Retailer Winter Market event in January, the company will have a new blend containing wool ready to show off.



COPYRIGHT