

# Smart socks

Fibre developers often use socks as a launch pad for their new developments. **Kathlyn Swantko** explores the latest innovations aimed at improving wearer comfort at Outdoor Retailer Winter Market

Suppliers attending the Outdoor Retailer Winter Market reported evidence that textile manufacturing is coming back to the US. And there was an air of optimism at the show, held in Salt Lake City, Utah, US.

“During these critical buying seasons, we work hard to provide a show atmosphere that cuts through tradeshow busywork and helps both attendees and exhibitors focus on strengthening their partnerships and developing future strategies,” says Kenji Haroutunian, ORWM show director.

However, raw material price hikes loom large over the industry and textile manufacturers remain cautious. With product development budgets reduced significantly over the past few years, fabric manufacturers are looking to fibre producers to create the new innovations needed to help drive the textile business. And it appears that fibre producers are responding.

Kim Hall, marketing manager for RadiciSpandex, attended the show as a panelist at a seminar on rising apparel costs. “While the worst appears to be

behind us, we want to be optimistic for the future. As a fibre producer, we are firmly committed to continuing our focus on innovation, research and the quality of our products, as well as on improving manufacturing efficiencies and the flexibility of our organisation. We believe that these solutions will, once again, make a difference in the textile/apparel business.”

As is usually the case during difficult times, the quickest and most economical way to test new fibre developments and processes, see the immediate benefits of the advancements and bring new fibre

innovations to market is through the sock/hosiery industry.

Once a technology is proved in socks, it is easier to promote the advancements to other garment applications. At ORWM, there was a noticeable increase in the number of sock exhibitors and several manufacturers showcased their new developments.

Having established itself in a successful cottage industry of hand knit alpaca garments made in Montana, Alpacas of Montana used ORWM to promote its commercially knitted products to a large outdoor audience and also to educate attendees more accustomed to using wool about alpaca fibre's benefits. Alpacas of Montana currently raises 120 alpacas in Montana and manufactures its commercial alpaca knit products in Peru.

James Budd, founder and owner of Alpacas of Montana, explains that alpaca fibre brings together comfort and functionality through the use of Alpaca Dry-Fusion Technology, in which the alpaca fibre can be blended with Tencel, nylon and/or spandex to create comfortable, body-forming, durable garments and socks.

Alpaca fibre is naturally hypoallergenic and offers extreme softness and warmth in a garment, says Mr Budd, adding that alpaca is warmer than sheep's wool, strong, resilient, lightweight, has excellent thermal capacity and is more luxurious than cashmere.

“Unlike sheep wool, alpaca fibre doesn't need to be super washed to remove lanolin and barbs,” explains Mr Budd. “And, through the use of an environmentally-friendly chemical topical treatment, it is now also machine washable.”



Salomon knee-high athletic sock containing Nanoglide

Salomon USA is working with Next Fiber Technology using the latter's product Nanoglide in several versions of its sock designs and constructions to keep the wearer's feet dry and comfortable no matter what the activity.

Nanoglide is a permanent, all-in-one, PTFE patented fibre technology offering sweat, friction and abrasion control. It provides protection on both the inside and outside of a garment.

Socks made with Nanoglide incorporate recycled PTFE particles into polyester, eco polyester or nylon fibres at the beginning of the fibre manufacturing process. Nanoglide is durable and breathable for fast evaporation via its unique PTFE channels and is said to reduce skin abrasion, blisters and other skin sores in next-to-skin fabrics.



**Outlast polyester bi-component fibres made with a phase change material core and polyester sheath**

*“These new machines can produce densely knit socks using our ultra-fine Merino wool yarns with a toe seam closure that is all but undetectable to the touch”*

Outlast Technology has recently succeeded in creating the first heat management polyester fibre. The newest member of the Outlast fibre family is a bicomponent fibre with a phase change material (PCM) core and polyester sheath. Outlast polyester combines the value of heat management with the characteristics of other performance polyester fibres. The new fibre has

applications in functional apparel worn next to skin, including T-shirts, socks, base layers, athletic wear and underwear, enhancing comfort.

Darn Tough Vermont used the show to tout its new True-Seamless socks made on the latest generation European seamless hosiery machines.

“These new machines can produce densely knit socks using our ultra-fine Merino wool yarns with a toe seam closure that is all but undetectable to the touch,” explains Ric Cabot, company owner. “The result is a seamless sock we can confidently offer with an unconditional lifetime guarantee.”

Darn Tough socks are knit using 21.5-micron, shrink-treated Merino wool that results in a density of 1,441 stitches per square inch, creating a fit comfort, durability, performance and chafe resistance on select lines, including its ultra-light ski, run and bike socks, says Mr Cabot.

“The advantages of our seamless technology is most evident in lightweight socks where the athlete wants as little sock as possible between the foot and shoe.”

Point6 is a new athletic sock company started by Peter and Patty Duke, the

original founders of SmartWool. The new company, named after the ideal body temperature, 98.6 (Fahrenheit), has created snow sport socks for children and adults using compact spun Merino wool, which makes the socks pill-resistant strong, durable, soft and smooth. Ski and snowboarding versions also have deep heel pockets to hold the foot in place, smooth toe seams and a snug fit with cushioning in appropriate areas to make the foot comfortable inside ski boots.

FITS Sock Co is the new name for the century-old Crescent Sock Company, based in Niota, Tennessee - the oldest hosiery mill in the US. Having previously manufactured socks for 30 other brands, the company now produces socks under its own name.

At ORWM, FITS Sock Co officially launched its F3 Technology which features a sculpted deep heel pocket, specialised toe box and contoured leg for a completely engineered ergonomic sock. The specialised technology prevents bunching, hot spots and friction, keeping the feet dry through any activity. Made with Merino wool the sock is also soft and breathable.