Fabric technologies to fore

Moisture management, odour control and a stretch fabric with improved recovery properties were among the developments showcased at Outdoor Retailer Winter Market held in Salt Lake City. Kathlyn Swantko reports

“Retailers came to ORWM 2010 ready to place orders because they have righted their inventory problems of early 2009 and feel a strong sense of optimism,” said Kenji Haroutunian, Outdoor Retailer Winter Market (OR) show director. “This optimism is not hollow hopefulness but is based on hundreds of brands maintaining real growth in 2009 and strong innovation fueling the development of better products for consumers in 2010/2011.”

Retailers attending the show also found reasons to be optimistic about their business. One store, Mountain Gear of Spokane, Washington, brought more of its buyers to OR than ever before. Paul Fish, Mountain Gear founder said: “We brought 11 buyers to the show this year and have found a high level of excitement here, much stronger than a year ago. Retailers missing this are missing a great opportunity to change their businesses for the better.”

Much of the optimism centred on new yarns and fabric technologies on the knitwear side and innovations that can be used in conjunction with knitted fabrics.

Concept III Textiles, based in Red Bank, New Jersey, US, has partnered with the Frederick, Maryland-based Next Fiber Technology, LLC and the Scandinavian-based Polygiene to introduce two new products that can be used at treatments for woven and knit fabrics.

“Ramblers Way Farm’s soft, comfortable next-to-skin Henley long-sleeved shirt, made from Kentwool’s WINDspun yarn

“We brought 11 buyers to the show this year and have found a high level of excitement here, much stronger than a year ago”

“Retailers missing this are missing a great opportunity to change their businesses for the better.”

“NanoGLIDE incorporates PTFE particles into polyester, ECOpolyester, or nylon fibres at the beginning of the fibre manufacturing process. NanoGLIDE wicks moisture and dries it fast, via PTFE channels, also reducing static and kinetic friction on the skin surface preventing skin abrasion, blisters and other skin sores, according to Mr Parkes. On the outside of the fabric, NanoGLIDE reduces friction and
abrasion that can cause wear and damage to the garment surface. According to Concept III, NanoGLIDE is more than nine times more abrasion resistant than performance nylon and polyester without the technology. NanoGLIDE protection is washable and also addresses UV degradation by providing more tensile strength after UV exposure.

The second development from Concept III Textiles is Polygiene. While this Scandinavian product has been adapted by many prominent European brands, Concept III has the exclusive right to introduce the Polygiene technology to the US market. Polygiene is a new active odour control technology that uses silver salt to treat high-performance textiles and other materials. In the treatment, low concentrations of silver salt, made from recycled silver, are used to deliver the active silver ions.

Polygiene can be applied at any point during manufacturing, from the fibre stage through to finished goods. However, most customers add the treatment at the fabric stage (pad and dye application), as it often represents the most efficient way of application.

Polygiene has no effect on other treatments, processes, or technologies and can therefore be applied at the same time as these, minimising additional application costs. It requires no binders, making it safe for next-to-skin use. The Polygiene particles are also more than 100 times larger than nano-silver particles, making it impossible for it to penetrate the skin, according to the company.

Rentex Fabrics, based in Quebec, Canada, showcased a new warp knit construction at OR, targeted at the cycling, triathlon, rowing and swimwear markets. The fabric is a blend of 56% Eco Circle fibre and 44% PBT polyester. Eco Circle, developed by Teijin, employs chemical recycling technology to enable repeatable recycling of used products into recycled yarns with no qualitative deterioration. The PBT (polybutylene terephthalate) fibre is a texturised 100% polyester filament yarn with stretch properties. PBT is said to have higher stretch and recovery than standard polyester.

**Stretch qualities**

David Turk, national sales manager for Rentex, explained: “The stretch qualities of our new Eco Circle/PBT fabric are equal to those of a spandex fabric, but while spandex will degrade with every laundering, the stretch of this fabric will improve with every wash.”

According to Mr Turk, the PBT/Eco Circle fabric is 100% polyester incorporating abrasion resistance, chlorine and perspiration resistance, has excellent stretch and recovery properties and is sustainable.

Wilmington, Delaware-based, Optimer Brands launched two new yarn developments at the show: drirelease Wool and drirelease Tencel. Its drirelease Wool has been selected by the Champion and Duofold brands as an integral part of the layering system used by the Expedition Champion climbing team as they climb Mount Everest, scheduled to take place this summer.

Chris Moore, general manager of Optimer Labs, said: “We have conducted lab tests that confirm drirelease Wool’s ability to help the body thermo-regulate and are excited to have our fabric’s performance proven under the harshest conditions Mother Nature can provide.”

The drirelease Tencel fabrics showcased prove that the combination of these two yarns can create fabrics that move moisture away from the skin, are fast drying, control odour, all while maintaining a luxurious drape and soft feel.

Kentwool, based in Pickens, South Carolina, US, used the OR Show to promote its newest yarn development, WINDspun, to the outdoor market. Tom Perkinson, sales manager for the company said: “WINDspun’s technology along with using fine micron wools make it ideal for next-to-skin applications. The yarn is being marketed towards everything from high performance activewear to eveningwear.”

According to Mr Perkinson, WINDspun, perhaps the highest quality worsted wool yarn in the world, is a new product that has been inspired by Kentwool’s passion for innovation. He said: “Our company’s innovative R&D efforts, state-of-the-art equipment, cutting edge processing technology and our dedication to high quality standards have enabled us to offer one of the finest, most luxurious wool yarns in Kentwool’s 167-year history.”