Dynamic developments

Technical advances in fibres and finishing designed to enhance the performance of active apparel were grabbing attention in Salt Lake City, reports Kathryn Swantko.

Textiles have been the driving force in the outdoor industry for 40 years,” said David Parkes, president and founder of Concept III Textiles. “And this is where our future is, but only as long as we’re able to continue to provide new innovations for the market.”

At this season’s Outdoor Retailer Show, which was held on January 20–24 in Salt Lake City, one major concern was the impact that increased raw materials costs will have on innovation. According to Parkes, product development and entrepreneurs are the lifeblood of innovations for the performance fabric industry, and their creative ideas are necessary in providing the excitement the market requires. Product development, he added, often starts with new innovations in fibres.

While there were some new developments evident at the show, the creativity was noticeably less than at previous events. This is probably a direct result of the current economic situation and increased costs of raw materials, which are not likely to change in the near future, as another raw materials increase is anticipated in March, followed by an additional price hike in the third quarter.

Despite continuing financial concerns, trends generating interest at this season’s show included urban wear, travel wear and adventure wear. Functional denim and functional duck fabrics containing either fibre-based developments or new finishing techniques are increasingly important innovations for these applications.

Future Materials takes a look at some of the latest products causing a stir at this year’s Outdoor Retailer Winter Market.

Future fibres

Invista launched its Cordura Duck fabric, the newest addition to its Cordura Nyco fabric portfolio, which is based on 45 years of proven military performance. Cordura Duck is an intimate blend of cotton and Invista’s T420 Nylon 6.6 staple fibre, and is specifically designed to deliver a comfortable, highly durable fabric solution with exceptional abrasion resistance and wear life.

“While most duck fabrics are traditionally made from 100% cotton, Cordura Duck fabric is designed with the outdoor enthusiast, worker and weekend warrior in mind,” explained Cindy McNaul, Cordura global brand director.

Cordura Duck fabric provides a versatile option that is exceptionally durable without sacrificing comfort, style and long-lasting durability. Like its sister product, Cordura Denim fabric launched in 2010, Cordura Duck fabric is designed for ready-to-wear, hunting, workwear, travel gear, bags and totes.
Membrane technology
Schoeller has been a leader in the current trends for today’s active lifestyle by meeting the need for multi-functionality in apparel. While Schoeller fabrics have always been recognised as an important ingredient in outdoor and ski apparel, the company is now helping to define the new category of urban-inspired functional wear for every eventuality, through the use of its temperature-adaptive, water- and windproof C_change; 3XDry for moisture management; and NanoSphere for weather- and water-repellency.

The trend towards streetwear is now influencing outdoor and ski products. This season, Athleta introduced the Dry Dipper, the perfect hiking jean made from Schoeller-denim fabric with 3XDry, featuring the stretch performance usually found in climbing apparel. The company also introduced the women’s Powder Jean, a feminine yet urban look that is also durable, stretchy, waterproof, and features C_change technology, which reacts to changing humidity, guaranteeing the wearer comfort and ideal moisture vapour transport.

eVent Fabrics is a collection of waterproof-breathable fabrics that was formerly owned by BHA Technologies, and was purchased by GE in November 2010. With the change of ownership, eVent Fabrics customers now have the opportunity to choose between branding the fabrics as their own or using the eVent Fabrics name.

Mountain Hardwear is using the newest eVent Fabrics technology in its new DryQ Elite collections. What separates this waterproof-breathable fabric from its competitors is that it’s air permeable. This means that the DryQ fabrics begin to transport moisture immediately, whereas with other fabrics the wearer can be uncomfortable because the fabrics don’t start transporting moisture until the atmosphere inside the clothing is already hot and humid at around 75% humidity, which means the wearer can be uncomfortable before the fabric works.

Dry-Tex and Concept III Textiles introduced its new TPU lamination waterproof/breathable fabrics for softshell applications. This collection of lightweight, high-performance woven/knit laminates have sweater-like textures that provide comfort stretch and surface interest in poly/wool and poly/acrylic blends.

Finishing touches
Yeh Group (China) and Innova Textiles, based in Boulder, Colorado, announced the implementation of the first commercial line of textiles known as DryDye fabrics. These fabrics are made with a waterless dyeing process, which utilises recycled carbon dioxide with only nominal amounts of CO2 for dyeing textile materials. According to the company, the DryDye fabrics made with this unique process will provide the same quality as the current conventionally dyed fabrics, but will eliminate their annual use of millions of litres of fresh water.

British Millerain and Concept III Textiles introduced its new Driden washable waxed cottons at the show. With its original authentic waxed cotton fabrics still important for traditional outerwear, British Millerain, the famed UK supplier established since the 1880s, has taken the latest trend in outdoor fabrics one step further by making the waxed look available in lighter fabrics with easy-care finishes.

Unlike traditional waxes that must be reapplied to the finished garment from time-to-time in order to maintain its look and weather resistance, the new Driden finish is permanently infused into the fabric, making it both washable and applicable for lighter-weight fabrics.

Traditional waxed cottons are usually 9 to 18 oz., but the new Driden is made with a special synthetic wax that can be applied to lighter synthetic fabrics, lending itself to a
Woolrich announced it has teamed up with Agion to launch its odour-eliminating technology, Agion Active, in the outdoor apparel market at Outdoor Retailer. Woolrich is introducing the technology in its collection of Merino and polyester blend base layers for autumn/winter 2011/12. The new development is targeting consumers who enjoy being active in cold weather, where working up a sweat can be uncomfortable when wearing a warm, formfitting shirt.

“We have customers that wouldn’t even look at the original waxes simply because of the care factor,” said Chris Parkes, national sales manager at Concept III, through which British Millerain products are available in North America. “Now, we have several companies sampling Driden for new outerwear projects, including everything from sportswear-styled outerwear to wind shirts.”

For autumn/winter 2012/2013, Concept III sees the trend in British Millerain’s performance waxed cottons continuing. Expanding on the line of the traditional neutral colours of taupe, browns and tans, the company is offering several brightly-coloured versions of waxed cottons. British Millerain has also launched a new line of rich-textured, rugged, waxed wools that are naturally water-and wind-resistant.

Four-way stretch laminate in 95% polyester/5% Lycra from Concept III.

Woolrich Active include the 50/50 Merino and polyester blend men’s crew and half-zip shirts, and women’s half-zip and v-neck shirts.

New partnership brings freshness to the outdoor apparel market

Lasting effects

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The new development is targeting consumers who enjoy being active in cold weather, where working up a sweat can be uncomfortable when wearing a warm, formfitting shirt. "While wool has the natural ability to eliminate some odours, by incorporating Agion Active into our base layers we are able to offer something that no other brand can – total confidence in knowing that no matter how hard you work or play you won’t offend those around you," says Jerry Rinder, Woolrich VP of sales and marketing.

Agion says the technology works by providing antimicrobial product protection and odour-elimination, as well as eliminating odours both on and around the fabric. Silver ion antimicrobial technology stops propagation of odour-causing bacteria on the fabric, while a natural, proprietary odour-trapping solution captures molecules from ambient odours. The treatment is also designed to regenerate with each wash to continue to perform for the life of the garment.

"We are excited to announce our partnership with Woolrich," says Paul Ford, CEO of Agion. "Agion is already a strong brand for odour control in footwear and we are pleased that our Agion Active technology for apparel can now be delivered by Woolrich, one of the most authentic and respected brands in the outdoor industry."

The Woolrich garments featuring Agion Active include the 50/50 Merino and polyester blend men’s crew and half-zip shirts, and women’s half-zip and v-neck shirts.