Three big trends came to the fore at the FabricLink textile outlook meeting at the recent Outdoor Retailer (OR) show in Salt Lake City. Sustainability has come back strongly (pulled by the consumer rather than pushed by well-intentioned brands as it was a decade ago); matched with this are multiple functions and benefits combined into one material, or even one yarn; and third, the increasing importance of the military driving product innovation.



Members of the panel at the FabricLink textile outlook meeting held at OR.
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On the near horizon

It appears that world events are hitting home with the US consumer, driven by fuel prices that are now passing $3 a gallon in a world where a price nearer one third of that was customary at the start of this century. This hit on discretionary spending is now accompanied by a general discomfort about world events. The panel at OR certainly felt that the time when sustainability was mandated from company owners is over and that it is now the development teams that are driving it, and the fact that large retailers are starting to commit in a way that says: "we will do this, even without a bigger demand from the consumer" should keep the momentum growing.

The panel also made it clear that sustainability is more than merely buying organic cotton, albeit this has been the leader. Those consumers that are involved in the concept of sustainability also expect their favourite brands and retailers to look at the subject from a holistic angle through examining the pipeline, the use of energy and the whole area of social responsibility. At the same time, research has shown that the environment is only the number four concern of a consumer when buying outdoor apparel, so there is still a challenge to meet the other performance needs and yet, at the same time, incorporate valid sustainability. Despite this, the panel was unanimous that the environmental story would continue to grow.

The increasing influence of the military in product development has been apparent for some time, but when the panel was asked to discuss any 'crossover' in technologies it was clear that the military side of things has really accelerated. Flame retardance, camouflage, ultraviolet (UV) protection and infra red (IR) technologies were all mentioned. Joe Walkuski, former director of textile R&D at Patagonia and now president of Texbase – a company that provides technology solutions for the textile industry – made the point, "Keeping an eye on other industries is a key element of any product development." He highlighted how seamless knitting came to the outdoor sector from US underwear retailer Victoria's Secret, and how silver was first used in the medical industry. "Crossover has and always will be a very important part of R&D," he concluded.

President of Deer Creek Fabrics, Steve Lucier, commented that one of the most interesting developments in the military has been with wool. With the increasing problems of sophisticated improvised explosive devices in Iraq and Afghanistan the need for proper fireproof, non melt, non drip materials has become much greater. At one end of the scale, but expensive and (at the moment) somewhat scarce, is Nomex, and at the other end is wool. The problem lies with enforcement of the Berry Amendment, which mandates that certain materials used in defence procurement contracts be made in the United States. As Steve Lucier explained to the meeting, and in a later interview later with *WSA*, the law requires that the wool used by the military comes from American

sheep. The sheep that now exist in the USA have been bred for meat not wool, so the country does not have the specialist wool fibres available to it, nor does it have the textile industry infrastructure left to fully handle it. At the same time the whole outdoor market has recognised the value of wool and some 'amazing' fine denier items are now available. Lucier says, "that wool ever went out of fashion is amazing."

Glenn Buchan of SmartWool shares this opinion. Talking to *WSA* he criticised the fact that, for him, so much of the synthetic world involves putting 'plastic on top of plastic' in order to counteract a defect or obtain a benefit, whereas wool offers efficient core temperature regulation and moisture wicking and, as it is naturally anti-microbial, there is no need to play with the chemistry in order to achieve the desired 'multi-tasking' result.

Multi-tasking materials

In the absence of a new miracle fibre, multi-tasking is clearly the 'buzz' word of the moment, with companies such as Unifi having moved quickly forward with its aio offering which can link anti-microbial, moisture management, UV protection, absorption, and other permanently engineered properties. This is now available in 100% recycled polyester yarn under the brand name Repreve.

James Morelli of American Fibres and Yarns and Mike Dodd of Pittards Leather linked consumer requirements such as comfort, convenience, consumer care, health and well-being into the properties demanded in materials and apparel. The team certainly saw great value in integrating the new properties into the material, or even the fibre, rather than adding a coating to the garment. "Encapsulation sounds a great idea," said one speaker, whilst James Morelli saw value in emphasising the user, "The people thing. What is the garment for? Then reverse engineer it back into the fibre."

One of the challenges seen was helping the consumer to recognise what was needed when going shopping as opposed to heading for a mountain or the desert. With most brands offering so many identical claims it becomes a problem to help the consumer buy what they actually want. At the same time volume may become an issue if too many variants are produced—can a mill really afford to make and stock every variant on offer? Most likely at some stage a balance will have to be struck. Mike Dodd made the comment that the dialogue was important, and that you should not always try and predetermine what an industry might need, "You cannot think for your client."

However, not everyone was in agreement on a move towards 'natural' technology'. Dina Puglisi of Clariant took the opposite view from Buchan and said the Swiss chemicals company has noted an increased demand for complex effects and saw a lot of opportunity for more chemicals to be involved. Yet, for Joe Walkuski the reality was that, "The current situation is too complex for retail. Too many technologies have plateaued so that it is hard to design a breakthrough. Perhaps the reverse is needed. Focus, simplify and fine tune."

Specific communication

Walkuski took the discussion further by emphasising the need for timely honest communications and Lucier evolved this element into a discussion on specifications—or tools to measure function and quality. To agree a 4.5 colour standard is one thing, but to achieve this in a range of 50 colours without needing to move into very expensive dyes for some colours is not feasible, so open communication is needed to avoid misunderstandings later.

The problem of 'unrealistic' test methods for moisture management was raised in this regard. It was agreed that in order to provide honest advice and to avoid misleading the customer with claims at point of sale, the technology needs to be standardised so that hang tags, etc. do not mislead consumers – which they often do, even if this is not intended. Mike Dodd responded that it was important to test the garment not just the fabric, as moisture management "has to relate to how the consumer feels".

As Lucier discussed with *WSA*, the language of communication is very important. He added that when asked what the best moisture management or the best anti-microbial is you must be able to respond: "What do you need it to do? It comes back to understanding what it is the consumer needs." For ten years when disposable incomes appeared to be higher, before the rise in fuel prices, people always bought the best. Now they are forced to be more realistic about their needs. The consumer has learned and, although laboratory tests are very important, they verify things objectively, you still need concurrent real world testing.

Having worked at Patagonia for 13 years, Walkuski is well-placed to take this discussion further. He argues that it is vital to assess how test data translates to the consumer. In this regard, he considers that research centres such as the Hohenstein Institute and Natick laboratories have done well in correlating test data with actual human beings.

For him, this concept of appropriate communications is the key to his own business of "helping people to avoid making mistakes when bringing products to market".



Joe Walkuski, president of Texbase.

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