A new series for schools called The Design World includes a specially made programme that looks at how textile innovations often make an impact in the sports and outdoor arena first before pushing into the ready-to-wear market.



BBC to present technical textiles to new generation

The United Kingdom's BBC has included a film on the subject of technical textiles in an educational series called The Designed World that it has put together for young people aged between 11 and 16.

The project first featured on sportstextiles.com in December after *WSA* received a series of phone calls from the BBC to discuss the idea. The corporation hopes the finished film on technical textiles, and the whole series, will increase young people's knowledge of a number of important design issues and provoke classroom debate about them.

The technical textile programme shows how innovation often comes into apparel designed especially for elite athletes first, before filtering down to the ready-to-wear market. There is also a particular focus on the contribution performance textiles can make to reducing the resources clothes consume over their lifecycle, through making them washable at lower temperatures, for example, and crease-resistant, reducing the need for ironing.

Mike Barry, the Marks & Spencer executive responsible for Plan A, the clothes retailer's programme for making its entire business more sustainable, features prominently. He describes the whole idea behind technical textiles as something very simple: it's about putting functionality into a product, a finish or a design element, to give extra benefits to the consumer.

The other main speaker in the programme is Rob Holdway, a sustainable design consultant and director of a Brighton-based environmental management consultancy called Giraffe Innovation. The most obvious examples of technical textile applications that occur to him are ones in which innovation at the fibre or fabric level offer clothing protection from spills or anti-microbial capacity. "Any designer should be interested in new materials and new processes," he says, "and in the new opportunities they bring. It could be the chance for designers to create something that's sexy, but that has a lower environmental impact. It's your job as a designer to look at the new materials that are coming onto the market and say, 'how can I use them'."

Textile innovation has allowed clothing manufacturers and brands to make products that consumers can wash at lower temperatures. If everyone in the UK washed their clothes at 30 degrees, it would have the same effect on carbon emissions as the removal of 300,000 cars from the road.

Marks & Spencer

COPYRIGHT

Sports link

In making the spread of technical textiles from sports and outdoor apparel to the world of ready to wear, Mike Barry says that the job of big retail companies like his to take innovations such as those we see break through in the world of sports first, and try to make them available to the average person on an average salary.

"We want to use these ideas wherever they can make a difference, in products such as school uniforms or socks. They should not just be a niche available only to people who are going to climb Everest or swim for gold in the Olympics," he insists.

Examples of ideas that have filtered into Marks & Spencer's clothing range that he shows in the film include a non-iron shirt, made from cotton, but treated with a special finish that cuts down on the need for ironing. Also, included is a pair of jeans, this time with a special finish that prevents them from becoming wet in the rain.

He explains that his company has 60 people working on Plan A, a big team, dedicated to putting the company's products together "in the right way". That means looking at new fibres, new chemical finishes and new production processes when supplier companies throughout the supply chain bring them to market to see if the new ideas can help Marks & Spencer improve its performance on sustainability.

Lifecycle management

But this concern cannot end at the point of sale. Rob Holdway makes the claim that up to 80% of the environmental impact of some clothes comes "in the use phase", through washing, drying in tumble-dryers and ironing.

"Anything you can do to reduce that burden is great," he continues. "If more people in the UK would wash their clothes at 30 degrees Celsius instead of 40, it would save the equivalent of the annual energy consumption of 2,500 villages."

According to his fellow speaker, Mr Barry, only 30% of people in the UK choose the 30-degree washing option at the moment, but if everyone did, the saving in carbon dioxide emissions would equal the saving the country could make by taking 300,000 cars off the road.

After-use dilemma

For Mr Holdway, one of the biggest discussion points concerning technical textiles is the difficulty that arises in some cases by putting them into landfill sites after use. "They don't break down in the environment as easily as natural textiles," he says, "so there is a problem with technical textiles at end of life. You could, of course, argue that technical innovations can expand the useful life of clothes, but this is a big issue and we have to try to get the balance right."

He makes a chilling prediction: five years from now it will be very difficult for clothing manufacturers and apparel brands to bring to market products that cannot biodegrade or go into a recycling programme when consumers want to throw them out.



Fair trade T-shirts cost £5 each at Marks & Spencer.

Marks & Spencer

One of the ideas that has come into Marks & Spencer's Plan A is to encourage more clothes recycling. Mr Barry's company has set up a partnership to this end with charity organisation Oxfam.

He explains: "Recycling clothes is going to be vital. There must be three billion items of clothing sold in the UK every year, and 80% of them are ultimately going to go to landfill, into a hole in the ground, when we have finished wearing them. It's daft. We want to look carefully at what we can do to recycle more, including far-reaching ideas such as extracting the wool from suits to use in other applications."

He throws down a challenge to the design community: to design great-looking clothes that are at the right price point for the mass market, and that are also "genuinely sustainable, meaning that they must have a minimum impact on people and on the environment" while the fibre is growing, while the garment is manufactured, when the consumer uses it and, later disposes of it. "It's a big ask," he says, "but if you can solve that for us, we would want you knocking on our door."

Perhaps the BBC programme will inspire a new generation of designers to take up the challenge.



Fresh Feet socks, with anti-microbial functionality thanks to a breakthrough with silver ions that made an impact first in the sports clothing sector.

Marks & Spencer

COPYRIGHT