

**TEIJIN**

“Using the Twaron® fiber as part of the yarn blend has led to clothing that is lighter, while offering higher performance.”

Michael Batson, Global FR Business Manager

 POLARTEC  
Flame Resistant

**Twaron®**

**Polartec:****New fabric solutions with Twaron®  
the market is looking for**

**Originally founded in 1906 in the town of Malden, Massachusetts, Polartec is probably best known as the inventor of the synthetic fleece in the 1980s. Now a world leader in technical performance fabrics, its main focus is still on outdoor clothing. But over the past few years, Polartec has also been making its mark in the military and industrial flame-resistant work wear market, with a focus on comfort and durability. This is where Twaron® comes in.**

**Polartec and Teijin Aramid create new layering system with Twaron® inside**

“We started to develop flame-resistant fabrics for the work wear market about five years ago,” says Michael Batson, Global FR Business Manager. “Our approach was to use inherently flame-resistant (FR) fibers and yarns as part of the solution, rather than treated fabrics, such as FR cottons, which have dominated the market for decades. About two years ago, we met Teijin Aramid and heard about the Twaron® fiber, which was doing very well in the FR market, and also in military applications.

“Whether our customers want fabrics to make next-to-skin lightweight t-shirts, fleece jackets or rain-resistant garments, we can make all those different fabrics now using the Twaron® fiber as part of the blend.”

We got on well, so we went down the road together to develop a new layering system for FR fabrics for the industrial worker, using the Twaron® fiber as part of the yarn blend. This has led to a recipe for a new clothing system that is lighter,

**Twaron®**

while offering higher performance and better FR than some of the alternatives that are available in the market.”

### Anything goes

“In October 2013, we launched the first three fabrics together at the National Safety Congress Expo, the largest annual safety conference in North America,” says Michael. “Since then we’ve continued to build on that. We now have various different fabrics in the line, and we’re continuing to add new items to expand our offering. And anything goes really. Whether our customers want fabrics to make next-to-skin lightweight t-shirts, fleece jackets or rain-resistant garments, we can make all those different fabrics now using the Twaron® fiber as part of the blend. We’re also getting a lot of specific customer requests, such as for fabrics that are lighter, have more stretch or can be dyed in a high-visibility yellow or orange color.”

### Dual Hazard FR

The new line is known as the Dual Hazard FR fabric line, because the industrial work wear using the fabric protects against two hazards: flash fire (such as in the oil market) and electric arc flash (such as in the electrical safety, electrical utility and power generation markets). “This is ideal for garment manufacturers, who want one fabric that they can sell to any of their customers, whether an electrical hazard customer or a flash fire customer,” says Michael. “And by adding fibers that can be dyed in high-visibility colors, we’re even providing protection against a third hazard. This is specifically interesting for those working on highways or in other busy industrial environments.”

### The comfort and look of street clothes

There’s a lot of market demand for comfortable FR clothing, says Michael. “In discussions with the different garment manufacturers about their needs, wearing comfort is always a common request. They want a lighter-weight knit garment that people can wear either on or off the job site. They should look and feel like street clothes, but also perform well in terms of FR. In today’s workforce, the younger guys want to look hip and cool – they don’t want to be wearing granddad’s coverall on



the job. They want to have something that they can wear any time. With our fabrics, you can’t really tell you’re wearing FR clothes other than the garment being labeled as such.”

“Teijin has been very helpful and a great development partner. Together, we’re creating fantastic new fabric solutions that the market is looking for.”

### Great partnership, growing together

The collaboration with Teijin Aramid has been a great partnership, emphasizes Michael. “We’ve been sharing information about market trends and we’re doing different promotions together at trade shows. Scott Burbridge, Teijin’s Sales Manager, visits us regularly, and we talk about opportunities to promote our story and grow together. They’ve been very helpful and a great development partner. Together, we’re creating fantastic new fabric solutions that the market is looking for. And it’s a market that seems to be growing fast, so our future together is looking bright.”

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