

RISE TO THE CHALLENGE: AQUAFIL AND TCX

2012 continues the series examining the work that ingredient brands carry out in partnership with clothing brands to make better clothing and footwear products for sports and outdoor activity. In this issue, we look closely at the joint efforts of Aquafil and TCX to put polypropylene microfibre Dryarn into technical underwear for motorcycle enthusiasts.

Riders stay comfortable under pressure

French TCX rally racer Cyril Despres in action at the Rally Dakar 2011 Argentina Chile.

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TCX, a specialist manufacturer of clothing for motorcyclists, has worked in partnership with Aquafil to use its polypropylene microfibre brand, Dryarn, in two new lines of technical underwear for motorcycle enthusiasts.

Consisting of distinct baselayer garments for winter and summer, the new underwear products offer breathability, heat regulation, protection from allergies and infections and easy care, owing to the use of Dryarn in their construction, the two companies have said. Other capabilities they have attributed to the use of the microfibre are high levels of moisture management, abrasion resistance, colour-fastness, fast drying time and recyclability.

Based in Montebelluna in the Veneto region of Italy, TCX is part of the Novation Group, which also owns outdoor footwear brand Kayland and safety footwear brand Jolly. Montebelluna, where Geox also has its headquarters, enjoys a long history of footwear and boot production and it's therefore no surprise that the product line TCX is most famous for is motorcycle boots. It has always had a keen interest in sports, with dedicated





Winter (with long sleeves) and summer tops from TCX's new technical underwear collections. The winter garment is made from 95% Dryarn, the polypropylene microfibre made by Italian yarn manufacturer Aquafil. The summer T-shirt has 45% Dryarn.

 TCX

lines in boots for speedway, motocross, motorcycle trials and other two-wheeled activities. Rally racing riders Marc Coma and Cyril Despres, Polish endurance event specialist Taddy Blazusiak, and current speedway world champion Greg Hancock are all TCX riders.

A major consideration in boots such as the company's R-S2 model is breathability (the upper is made from a lightweight, breathable and wear-resistant microfibre). It's not such a stretch, then, to go from this to the new underwear collection. Lightness is another of the main requirements that competitors such as the four motorcycle riders mentioned have when it comes to clothing.

The fibre mix in the TCX Base Layer Summer collection is 45% Dryarn, combined with 50% polyamide and 5% elastane. Tops include sleeveless, necked and T-shirt versions, all of which are seamless, and an alternative "extra breathable" version of the T-shirt. The key performance element here is that a special tubular construction of the microfibres creates a grid for channelling airflow at the points where the wearer is likely to sweat most, that is the shoulders, torso and back. According to TCX, this construction, which it has used in the fabrics for all these garments, helps riders avoid overheating and keeps their body temperature constant. There are two options for bottoms: boxer shorts or full-length leggings.

Base Layer Winter is a similar story with one key difference: the fibre mix this time, apart from a 5% elastane content, is totally dominated by Dryarn, which has a 95% share. The motorcycling brand wanted material with heat-

regulation and breathability properties because the collection is designed for use underneath protective outer garments. It comprises a long-sleeved top in windproof and ordinary versions, leggings and also an attractive all-in-one suit.

That its partner should have chosen Dryarn to feature in both collections seems logical to Aquafil. "Dryarn is the lightest microfibre in the world," the Italian yarn manufacturer says. "It is extremely lightweight (in terms of specific weight) offers excellent heat insulation, protecting its wearers from both the heat and the cold, and is a bacteriostatic fibre." Other qualities include being permeable to steam, allowing perspiration to be transferred rapidly towards a garment's outer surface, hypoallergenic and dermatologically tested, resistant to abrasion and pilling, quick-drying, stain-resistant and machine- or hand-washable (although a machine wash would need to be at high temperature). The material is also recyclable, fulfilling another requirement that TCX and Aquafil share, good environmental credentials. "Sustainability should be a way of thinking and being," Aquafil president, Giulio Bonazzi, has said. 

TCX wanted the garments in its underwear collections to offer high levels of breathability and moisture management in a lightweight fabric.

 TCX

