

Metamorphosis into Color – CoolVisions®

The world's first dyeable polypropylene



Requirements in the textile industry have been ratcheting up, challenging the industry to adapt and meet ever-higher performance and environmental standards. CoolVisions®, the world's first dyeable polypropylene, is one fiber meeting these challenges. The metamorphosis of CoolVisions® since its introduction in 2006 to marquee brand adoptions has been dramatic. Metamorphosis, defined as a profound change in form from one stage to the next in the life history of an organism, is a fit description for the life of this timely fiber. Let's take a look into the evolution of color into the world of polypropylene.

CoolVisions® is a product of FiberVisions and is based in Duluth, GA. The company has facilities in the United States, Denmark and China and is the world's leading manufacturer of specialty mono and bi-component fibers. The Company's products are marketed into the non-woven, industrial, automotive and apparel industries with a global capacity of over 200,000 tons per annum. FiberVisions was purchased in January of 2012 by Indorama Ventures Public Company Limited (IVL), the world's leading integrated polyester producer. Mr. Alope Lohia, Group CEO of IVL said, "The acquisition of FiberVisions significantly enhances IVL's position. As the largest producer of polypropylene staple fiber, FiberVisions complements our strength as the world's largest polyester producer and together we will increase our ability to satisfy customer needs in all parts of the world".

The customer's first response to a fabric is color but we know that the path to adoption requires much more. CoolVisions®' development of a wide range of colors through yarn-dyes and dyeable greige goods facilitates design, production time, speed to market and cost compared with solution dyed products. Of course, since CoolVisions® is polypropylene, dyeability is just the beginning of the fiber's performance attributes which include low moisture absorption, excellent moisture transport, bleach cleanability, stain resistance, lightweight, quick

drying, thermal properties and durability. Essential to a new fiber's growth is the ability to work within the existing supply chain. CoolVisions® has done just that with advancements in spinning using Murata vortex, Murata air jet and ring systems providing finer, softer fibers. Knitting and weaving also fits into existing mill parameters as a result a variety of fabric constructions have been developed. Creating new fiber blends is another step in a fiber's expansion. Jose Fernandez, President of Global Merino provided an example, "Merino with CoolVisions® is an optimal performance blend. CoolVisions® mirrors Merino's thermal properties well while the superior moisture management of CoolVisions® reduces dry time. Each fiber improves the performance of the other with little or no trade off."

It's natural for a new fiber to transform as it moves to market and gains success. CoolVisions® has matured with the help of a broad array of partnerships in the U.S., Europe and Asia with yarn spinners and fabric mills. The fiber meets 2A wash fastness standards, can be spun as fine as 60's and has the ability to have performance treatments added at either the fiber or finishing stages. For those interested in "Made in U.S.A", CoolVisions® fiber is produced solely in the Covington, GA plant. However, brands adopting CoolVisions® recognize not only its superior performance features and working supply chains but also its inherent sustainable attributes. As reported by Jeimy Lee, Executive VP Marketing & Sales Dept. of Her Min Textile Co., Ltd., "We have run 100% dyeable polypropylene yarn-dye twill with one side brushed for Orvis. We believe this quality has unique characteristics; it's totally eco-friendly, lightweight with a rustic look and thermal function. Due to the hydrophobic effect of polypropylene this shirt is quick dry, which in the washing and drying provides energy saving at the consumer level".

The HIGG Index rated polypropylene one of the top sustainable fibers. Developed by the Sustainable Apparel Coalition, "the index was developed over seven years by Nike and partners. "When the S.A.C. took it over we did a thorough academic review and made many changes" according to Jason Kibbey, Executive Director Sustainable Apparel Coalition. A Wall Street Journal article highlighted the fact that polypropylene has a better rating in the index than cotton. Dr. Prashant Desai, FiberVisions Director of Business Technology, explained "Of the major synthetic fibers, polyolefins are the only ones which begin as a co-product, with lower greenhouse gas emissions and lower energy use than other fiber resins. Polyolefin fibers are clean burning and have a very high calorific value when incinerated as part of a mixed waste stream, providing a high energy value for the amount of CO2 emitted during incineration." CoolVisions® was awarded Oeko-Tex certification earlier this year.

A wide variety of brands have adopted CoolVisions® including outerwear (The North Face, Mountain Hardwear and Kathmandu), workwear (Duluth Trading and 5.11 Tactical), and activewear (Puma, SportHill, Terramar, and Specialized). These brands selected a fiber that performs like the best synthetics with the soft hand of a natural fiber, made with fine yarns, great drape and interesting surfaces. CoolVisions® made the transformation into a full-fledged wide color spectrum fiber fit for the markets with the toughest standards.

Be a part of the change. For more information contact Susan McGreal,
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