TENCEL® COMBIPOLISH PROCESS AN ALTERNATIVE FINISHING FOR TENCEL®/COTTON JERSEY

Karin Kämpf, Martin Köllerer, James Liggins, Han Kuilderd
LENZING AG, 4860 Lenzing, Austria

TENCEL® (brandname of lyocell fibres from Lenzing AG) as the most sustainable man-made-cellulosic fibre offers a range of different options for applications which are not yet fully utilized. Based on the success of TENCEL®-cotton blends in the woven market Lenzing has jointly developed together with Novozymes a modified concept using TENCEL® fibers to expand significantly into the global market to be used for knits in blends with cotton. It offers the possibility to establish a market segment through this innovative application.

The TENCEL® CombiPolish® process combines jet dyeing and enzyme treatment in one process to achieve a durable clean fabric aesthetic with TENCEL® Standard / Cotton fabrics in the most efficient, cost effective and sustainable way and helps to achieve an outstanding pilling performance and wash durability in comparison to the non-enzyme treated TENCEL®std./cotton quality.

Since there is constant demand for environmentally friendly materials and processing route, the idea came up to look for possibilities to reduce the footprint of TENCEL®/cotton finish in the dyeing in comparison to the well-known conventional process introduced in the 90s of the last century.

- 3 in 1 process – bleach clean-up, biopolishing and dyeing in one bath
- Saving 60-90 min in process time
- Saving water, energy up to 50 %
- Improved fabric strength
- Improved process reproducibility
- Improved color matching

Based on these initiatives Novozymes and Lenzing are about to finalize the rollout of this concept via collaborating with certified formulators in the global textile business.