

Tonello Develops New Technology

Italian manufacturer Tonello has developed new garment-finishing technology to create special effects on finished garments and jeans.



Tonello washing machine



Effects with Tonello's Kit Batik

Compatible with all Tonello washing and dyeing machines, Kit Batik can produce a range of effects including 'Rain', 'Stained' and 'Tie-dye' finishing, as well as fading and multicolour batik effects. To give denim garments a used look, the unit produces the 'Antarctic' effect, achieved without stonewashing, and 'Dirty Batik' finish.

Kit Batik can be installed on all Tonello washing and dyeing machines starting from the G1 70 model and including the G1 N2 nitrogen dyeing machine. The technique therefore does not require any hand work.

When combined in the G1 N2 with other finishing such as Laser Blaze, 3D Bohemia or sulphur dyes, Kit Batik can offer a larger variety of looks.

Bitex Goes Green with iMaster H₂O



The Bitex headquarters

German commission dyer Bitex Textilwerk has recently installed the Thies iMaster H₂O dyeing unit to improve the environmental impact of its operations.

"Today, like many dyehouses, we have had to introduce a very stringent 'green' policy which includes recirculating water and steam in order to reduce our water and heating costs," said Bitex dyeing manager, Christoph Hamm. "The Thies iMaster forms a key element of our 'green' strategy and was purchased specifically for dyeing cottons and polyesters."

The iMaster H₂O high temperature fabric dyeing machine offers low water consumption, starting at a liquor ratio of 1:3.7 for cottons. The machine is designed to offer a reduction in process times and improved quality in terms of appearance and elongation of fabric. The new Thies model has been designed for a range of fabrics, including knitted natural and synthetic fibres and blends, including viscose. To enhance the surface of the fabric, the machine operates at a speed of 90m/min, ensuring dyeing, bleaching and rinsing is carried out with low nozzle pressure.

The fabric speeds, nozzle pressure and plaiter are all automatically synchronised, whilst the new 'smart dose' system offers improved levelness and dosing tones.

"We have already noticed a significant reduction in water and chemicals with the new unit and it compares favourably with the 1:10 and higher that we previously achieved with our other dyeing unit," said Mr Hamm. "We regularly receive requests to dye smaller batches. The new iMaster has a design capacity of 200 kg but we are able to work, constantly mixing batch capacities as low as 60kg, with no difficulty."

The iMaster is also designed to offer minimal rope lifting, ensuring enhanced shrinkage control and reduced rope curling for elastane fabric blends.

Bitex has a wash and dyeing capacity of 50t/month. The company dyes a range of textiles including tubular and open knits in cotton, wool, polyester, polyamide and elastane blends.

Cashmere Fibre Analysis

The Cashmere and Camel Hair Manufacturers Institute (CCMI) has designed a tool to assist testing laboratories and organisations in fibre analysis.

The Fibre Box contains 48 samples of various types of cashmere fibre, as well as hairs from animals whose fibres resemble cashmere. Each 2g to 3g sample is labelled and packaged in a plastic tube. The Fibre Box includes 25 cashmere, three non-cashmere goat, one cashgora, three camel hair, eight sheep wool, seven yak and one ibex fibres.

The box contains both typical and atypical fibres of the species, as well as fibres with chemically and physically modified surfaces. The sample fibres are not 'standards' of the species of animals, but are 'reference samples' for assisting identification of animal fibres, said the CCMI.

All samples are examined by multiple laboratories using a light or scanning electron microscope and in some cases DNA is also analysed.

Machinery Research Project

An EU research project is trying to boost innovation in European-made textile machinery, helping small-and-medium sized companies fend off Asian competition. The NU-WAVE project has a Euro EUR2.5 million budget and ends this December. Its aims to make EU companies' machines "more flexible, productive and efficient to...cope with highly variable and functionalised textile products", reducing energy usage, noise and vibration, said the European Commission. Partners include Italy's Comez Gestioni and Giussani Srl; Germany's Forschungskuratorium Textil; and the Czech Republic's Naveta CZ.