

Lab-Pro's Dyewa machine features a rotating perforated beam whereby the dye bath is sprayed from the interior of the beam onto the fabric wound on the beam.



Brückner's Power-Frame Ecoline offers enhanced air flow and heat recovery.

GrnbH showed the **Goller** Economica Dye Pad, a heated dye pad designed for open-width knit goods. The pad has been designed to minimize fabric distortions on delicate fabrics.

An truly innovative beam dyeing machine was debuted by Switzerland-based **Lab-Pro GmbH**. The Dyewa machine features a rotating perforated beam whereby the dye bath is sprayed from the interior of the beam onto the fabric wound on the beam. Both cotton and polyester fabrics can be dyed in 200 kg batches using up to 40-percent less water than conventional beam dyeings, according to the company.

Italy-based Laip S.r.I. offered two low liquor ratio jet-dyeing machines. The Airjet 2000 can dye fabric at a liquor ratio of 1:3, while the Jet 250HT is capable of operating at a liquor ratio of 1:1.8.

The Dos-Chem dosing system was presented by Italy-based Lawer S.p.A. The system provides auto-

mated dosing and dispensing of dyes and chemicals for laboratory and pilot plant dyeings and includes automated weighing and dissolving of liquids and powders.

MCS introduced the Dynamica Sprint high-temperature jet-dyeing machine that allows five-hour dye cycles at a liquor ratio of 1:3.5. The machine has a unique heat-recovery system that provides for significantly lower energy requirements.

A new wash box design for indigo dye ranges was shown by Morrison Textile Machinery, Fort Lawn, S.C. The Peak washer has a patented flow system that reduces water usage by 50 percent, and also leads to increased rebeaming efficiency by minimizing yarns distortions, according to the company.

Oasis® Dyeing Systems LLC, Leesville, S.C., presented the Oasis® process, a continuous dyeing process for 100-percent cotton that incorporates a Gaston County foam dyeing system on fabric that has previously been pretreated with the Oasis treatment. This treatment permits fiber reactive dyeing with no salt, alkali, thickeners or afterwashing.

An automated package dyeing machine for lab and pilot plant was introduced by **Obem S.p.A.**, Italy. The four-tube machine can accommodate up to 10 packages per tube in either a horizontal or vertical configuration with automated loading and unloading.

France-based Rousselet Robatel displayed its continuous treatment line for fiber bleaching, dyeing, and finishing applications. The conveyor belt system can accommodate production speeds from 100 to 1,000 kg per hour.

A new approach to indigo dyeing called Smart-Indigo™ was shown by Switzerland-based Sedo Engineering S.A. Leuco indigo is produced electrically under an argon atmosphere resulting in reduced pollution and significantly reduced chemical costs, according to the company.

Italy-based **Tecnorama** exhibited Shakerama, a high-temperature laboratory dyeing system that simulates the liquor ratios and mechanical action of production dyeing machines. Dyes and chemicals are automatically measured and dispensed by the system.

An innovatively designed jet-dyeing machine was presented by Fong's Europe. The **Then** Supratec LTM features adjustable liquor ratios — ranging from 1:6 to 1:12 — and kier angles to accommodate a wide range of fabrics. The Then Airflow® Synergy 8 jet-dyeing machine on display at ITMA can operate at liquor ratios of 1:3.5 and consuming up to 25-percent less energy, according to the company.

Thies GmbH & Co. KG, Germany, introduced the DyeControl dyebath monitoring system that measures pH, salt, and dye concentrations, as well as total water consumption. This information can lead to reduced cycle times and water usage, according to the company. Thies also introduced the iMaster Mini, a lab and pilot plant version of its iMaster H₂O production dyeing machine.