



Short Staple Pre-Spinning Machinery at ITMA '03

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ABSTRACT

Short staple pre-spinning machinery shown at ITMA'03 in Birmingham, England emphasized compact opening lines with integrated multi-functional equipment. New technologies in carding included new machinery design, monitored and controlled waste removal, and a lengthened carding zone. Drawing innovations included a self-optimizing system for setting the break draft and an automatic quick adjustment of roller spacing. No new developments were shown in the short staple lap winding and combing areas. The only interesting feature shown on roving machines was a quick doffing system.

Keywords: Opening/Cleaning/Blending, Carding, Lapping/Combing, Drawing, Roving

Opening/Cleaning/Blending

There were fewer machines and vendors exhibiting in these process areas than in the previous four ITMA exhibitions. Notably absent were Rieter and Crosrol. Since ITMA'99 Crosrol has gone out of business. Marzoli had a booth at the show but did not exhibit any machinery in this area.

Trutzschler

Several new developments were introduced by Trutzschler in the opening room area of short staple processing. Major emphases were placed upon equipment allowing for a compact 800 kg/hr opening line, an integrated separator, a more precise removal of foreign fibers, and a waste control measuring system.

Compact Opening Line

A complete opening line with only four components is now possible. Apart from the

classical tasks of opening, cleaning, and blending, the functions of fire protection, micro-dust removal and foreign fiber separation are now integrated. The implications for short staple yarn producers would be lower space requirement, less exhaust air, lower energy consumption, and lower maintenance and setting expenditure. The four Trutzschler components making up the compact line are as follows:

- 1. Automatic Bale Opener BLENDOMAT BO-A
2. Multi-function Separator SP-MF
3. Integrated Mixer MX-16/CLEANOMAT Cleaner CL-C4
4. Foreign Part Separator SP-F

Integrated Separator (Multi-function)

Trutzschler offers a modular system for the detection of foreign matter in the raw material. Emphasis is put upon a combination of separating metal particles,