Textechno
textile testing technology

MDTA-4 and QuickSpin Unit

Automatic Fibre-Length-, Impurity- and Spinnability Tester plus Laboratory Spinning Machine

Cotton Control

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Impurities Testing

One of the most important quality concerns of a spinning mill is the purity grade of the raw material. Textechno´s latest version of the Micro-Dust and Trash Analyser, the **MDTA-4**, separates the clean cotton from any impurity and precisely analyses the dust content, fibre fragments, short fibres, neps, seed-coat neps and trash particles. Dust and fibre fragments are separated from the other impurities by appropriate filters and thereby analysed separately. Neps, seed-coat neps and trash particles are collected in a separate chamber to be weighted by a high-precision balance. From this weight the non-lint percentage is determined; the optional **NT-DA (Neps and Trash-Digital Analysis)** classifies the impurities according to their size and number. Hence, the **MDTA-4** is the first testing instrument to combine both test methods – the weight percentage and number of impurities per gram.

The **MDTA-4** allows measuring different sample forms, such as raw cotton from the bale, tufts before carding, carding- and draw-frame slivers. The instrument can be used to analyse the cleaning efficiency of the back process and carding machines.

During the measurement a sample of up to 10 g is mechanically opened down to single fibres by a roller. In this process the energy required to open the sample is recorded to determine the opening behaviour, which is an essential parameter for the carding process. Both, cotton and man-made fibres can be tested by the **MDTA-4**.

MDTA-4

Fibre-length measurement

The clean fibres either enter a rotor ring assembly, where a sliver for further processing is formed, or will pass an opto-electronic sensor assembly. Here, the length of individual fibres is measured using digital image processing. This length measurement assures not only an accurate fibre length value, but also a precise determination of the short fibre content in absolute numbers.

Spinnability

In case the clean fibres enter the rotor ring assembly, a sliver is created that can be processed by the **QuickSpin Unit** to produce an OE yarn. Since the **MDTA-4** is suitable for all types of fibres, even blends of different fibre types or colours can easily be processed and evaluated.

QuickSpin Unit

The **QuickSpin Unit**, is an one-position OE spinning machine on laboratory scale and produces yarn samples of approximately 400 meter length. This yarn can be used to measure important parameters such as hairiness, evenness and tensile pro-perties. Moreover, the **QuickSpin Unit** also processes slivers from the production floor, due to its flexible setup parameters.

Quick Spin Unit

Finally, the combination of both instruments, the **MDTA-4** and the **QuickSpin Unit**, serves to provide a large amount of important parameters along the production chain. Hence the **QuickSpin System** is a perfect tool for spinning mills to dramatically reduce waste and production costs.

Technical data MDTA-4

Power supply and consumption

Power supply: 230 V, 50 (60) Hz

Compressed air supply

Air pressure: 6 bar
Capacity: Approx. 100 l/min

Dimension & weight

Height: 1250 mm
Width: 1250 mm
Depth: 900 mm
Weight: 270 kg
Lacquer finish: RAL 9006 / 5002

Technical data QuickSpin Unit

Power supply and consumption

Power supply: 230 V, 50 (60) Hz

Compressed air supply

Air pressure: 6 bar
Capacity: Approx. 100 l/min

Dimension & weight

Height: 1720 mm
Width: 1370 mm
Depth 800 mm
Weight: 410 kg
Lacquer finish: RAL 9006 / 5002

The above technical contents can be subject to changes by Textechno.

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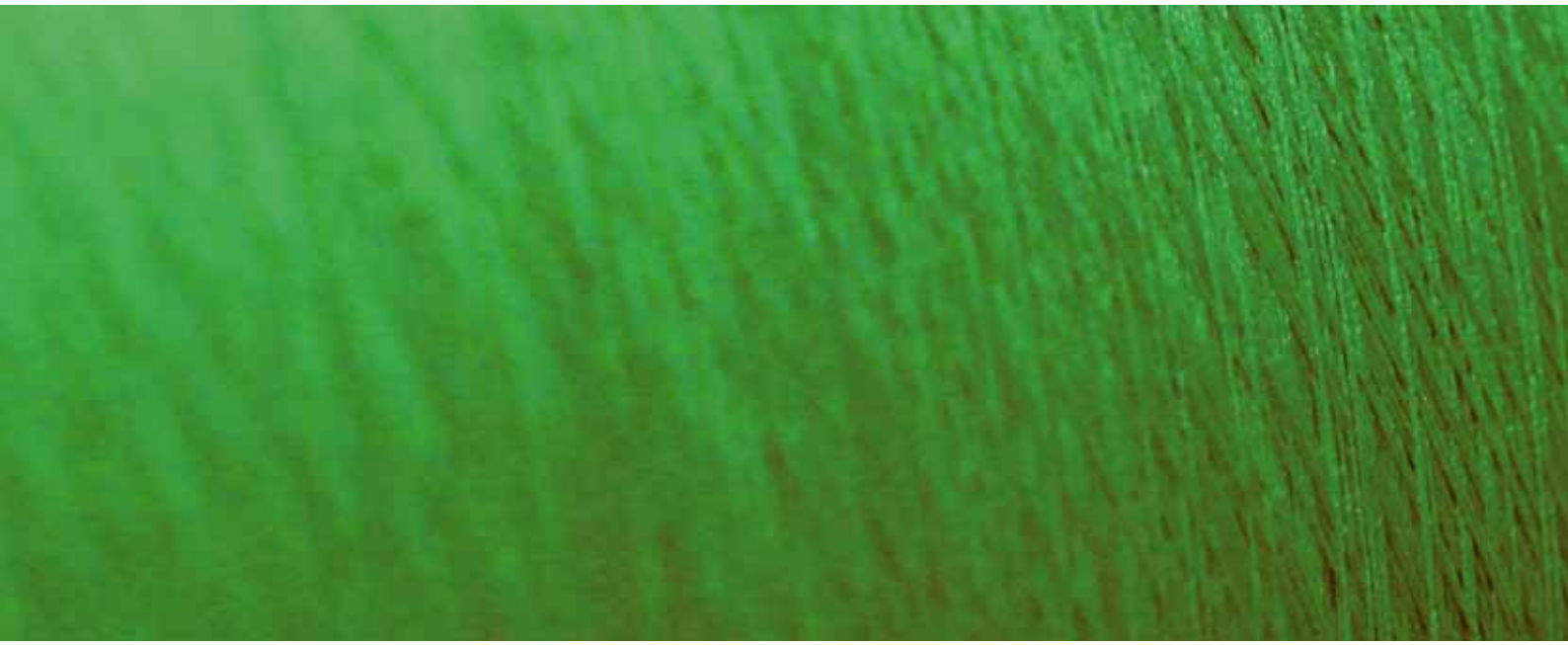

THE TEXTECHNO GROUP

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quality improvement

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