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Textechno
textile testing technology

THE TEXTECHNO GROUP

Your reliable partners for
quality improvement

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LENZING INSTRUMENTS

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TAPETEST

Test System for the Performance of Tapes

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Test System for the Performance of Tapes

During manufacturing of composites using tape laying processes the quality of the tape is essential. Variations in the tape affect both – the robustness of the manufacturing process as well as the quality of the final product. Thus, quality control of tapes and improvement of final composite performance are imminent.

With TAPETEST for the first time a commercial test system is available, that characterizes tapes in detail in multiple aspects.

Moreover, TAPETEST opens the possibility to create a digital twin of the tape. This allows to use every meter of the tape in the best possible way: avoid the laydown of faulty tape sections into critical section of the composite to improve product quality and increase production efficiency.

Technical Data TAPEPEST

-	Mains supply	230V, 50 (60) Hz
-	Compressed air	5 bar
-	Finishing	anodized aluminium
-	Dimensions	height 1500 mm
		width 4380 mm
		depth 660 mm
-	Weight	612 kg

Fibre Orientation Module

Monitors the fibre orientation in CF-tapes using polarized light. Variation in fibre orientation, baked-in fluff and stray filaments are detected.

Width and Thickness Module

Measuring the width and the thickness of the tape using laser-triangulation. Detects gaps and variations in the cross-sectional profile of the tape.

Wind-off Module

with active tension control and broken filament counter.

Friction Module

Measuring the friction of the tape to arbitrary surfaces (in combination with the tension module).

Eddy Current Module

Measures the internal fibre orientation and homogeneity of fibre distribution using Eddy currents.

Thermography Module

Measures the dynamic heat take-up of the tape, revealing possible problems during in-situ consolidation during the laydown of thermoplastic tapes.

Tension and Broken Filament Module

Measures the tension of the tape after passing through the Friction Module. Counts the number of filaments extending from the tape.

Wind-up Module

Transports the tape through the modules of the TAPETEST. Wind-up for further use of the tape.