DELTA 100

LENZING INSTRUMENTS

WET ABRASION TESTER

A precise characterisation of the abrasion properties of single fibers in the wet state enables an estimation of their fibrillation tendency. Therewith, the strength of the fibers in further processing and the haptic properties of end products can be predicted.

With Lenzing Instruments **DELTA 100**, up to 20 single fibers are tested simultaneously for their abrasion characteristics in wet conditions. A fully automatic test procedure ensures for reliable and reproducible results without any subjective influence of the operator.

During the test, either a shaft covered with a predefined viscose hose or a sandblasted metal shaft rotates with constant speed, whereby the hose is constantly moistened with water.

A simultaneous axial movement of the shaft prevents groove to develop. The wet abrasion level is determined by the number of revolutions required until the fiber tears.

The titer dependent measurement results of the number of revolutions until breakage are calculated and presented in the software in consideration of the titer.

FIBER TESTING

The Testing Company

DELTA 100

WET ABRASION TESTER

Scope:
Automatic measurement of the abrasion of single fibers in wet conditions.

Method:
Up to 20 single fibers are fixed with a defined angle and a pretension weight over a shaft. During the measurement, the shaft rotates at constant speed and at the same time, it is being permanently moistened.The wet abrasion level is determined by the number of revolutions, with which the fiber tears.

Results:
The measured values are stastistically evaluated and displayed in the software.
Since the measured values are titer dependent, it is necessary to consider the titer in order to get an exact result. If not, the target titer is taken into account.

Number of samples
max. 20

Minimum fiber length:
Scrubbing angle 100°: 25,5 mm
Scrubbing angle 0°: 17,5 mm

Fiber pretensioning:
With Vibroclips

Flow rate:
5,6 ml / min

Scrubbing shaft:
Effective length: 340 mm
Diameter: 10 mm
Material: stainless steel; surface sandblasted
Wetting: channel below the shaft; water supply by external tube pump
Speed: 100 - 500 rpm
Oscillating speed: approx. 10 mm/min
Angle between fixed fibres and shaft
before measurement: -10°
during measurement: 0 - 100°

Power supply:
230 / 115 VAC ± 10 %,
50 / 60 Hz, 130 W

Dimensions:

Height:	260 mm
Width:	820 mm
Depth:	430 mm
Weight:	50 kg

Evaluation and Control unit:
Personal Computer, Keyboard, Windows® operating system

Interface:
Ethernet

Technical data and pictures are subject to change!

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