



Only regular testing of the titer of single fibers (dtex, den) assures for proper knowledge of the fiber production process. Also for income control in spinning mills the titer and its variation is highly important. But how can you measure the titer of single fibers quickly, easily and reliably?

VIBROSKOP 500 is an instrument for the automatic determination of the titer (dtex, den) of single fibers. By an advanced and patented approach of the vibration method (Vibroskop method) it assures best accuracy and reliability and it eliminates any influence of the operator.

As the inventor of this vibration method, we are proud to say that it has become the world standard instrument for the measurement of linear density (dtex, den).

VIBROSKOP 500 meets all international standards (ASTM, BISFA, ISO, DIN, ...). It is one button operated with ergonomic and easily read displays. In most installations, **VIBROSKOP 500** is used in combination with the tensile tester **Vibrodyn 500** to efficiently create complete tests with individual titer, tenacity and elongation results, thereby giving reliable quality feedback.



Scope:

Electronic instrument for automatic determination of the titer (linear density, fineness, denier, dtex) of single staple fibers and monofilaments by means of the vibration method.

Method:

Prior to a test, the appropriate pretension weight has to be selected and set on the instrument. Thereafter, a fiber with the corresponding pretension weight is loaded into the instrument. By pressing the operation

button shortly, the measurement is initiated and the fiber is set into its natural vibration by an electronic delta impulse. The titer is derived from the fiber's vibration frequency. The automatic measurement assures easiest handling, minimum influence of the operator and therewith best accuracy and repeatability.

Results:

The sophisticated evaluation software allows to generate the results report in either dtex, denier or both values. Combined with **Vibrodyn 500**, a complete results report with titer, elongation and individual tenacity (tension at break based on the individual fiber titer) is created.

Titer range:

0.33 - 200 dtex
(0.30 - 180 den)

Fiber length:

Minimum length is 28 mm

Result display:

Digital, easy-to-read 4 digit read-out in either dtex or denier

Accuracy:

± 1 %, surpasses the specifications of ASTM, BISFA and DIN standards

Repeatability:

Better than 1 %

Specifications:

The applied vibration method conforms with the international standards BISFA, ASTM D1577 and DIN 53812.

Accessories (included):

6 Vibroclips, calibrated better than 0.5 %, working pad and tweezer

Evaluation software:

Individual single results plus statistical evaluation

Power supply:

230/115 VAC ± 10 %
50/60 Hz, 70 W

Dimensions:

Length: 550 mm
Width: 410 mm
Height: 570 mm
Weight: 24 kg

Data output:

Ethernet

Optionally available:

- OPC UA interface
- VIBROSKOP 500 short staple version for a minimum fiber length of 20 mm

Technical data and pictures are subject to change.