

VIBRODYN 400



Do you need reliable and fast feedback on tenacity and elongation of single fibers and monofilaments at a high level of flexibility?

Our **Vibrodyn 400** has been developed to satisfy the most different requirements in tensile testing. Programmable microelectronics guarantee maximum flexibility.

The instrument is „one button operated“. That means easiest and fastest handling, avoiding any operator influence and therefore making the measurement reliable.

Vibrodyn 400 meets all international standards (ASTM, BISFA, ISO, DIN, ...).

It is auto-calibrated and its accuracy and repeatability are better than required by all the above standards.

Vibrodyn 400 is the reliable solution for producers who look for a flexible and economic instrument testing tensile properties. Its measuring range fulfills the requirements for testing of all common fibers.

In combination with **Vibroskop 400**, the actual fiber titer (dtex/den) can be determined and automatically transferred to **Vibrodyn 400** for evaluation.

Scope:

Electronic, automatic dynamometer for the measurement of tenacity and elongation of single fibers or monofilaments.

Method:

The fiber with the corresponding pretension weight is loaded into the instrument.

By pressing the operation button the tenacity test takes place. It is

recorded by the computer in relation to the actual linear density provided by **Vibroskop 400** or to the nominal titer.

The automatic measurement assures easiest handling, minimum influence of the operator and best accuracy.

Results:

The evaluation software allows to create the result report with tenacity (cN/tex, g/den), elongation, force, young modulus and elasticity modulus with graphics and histograms.

Combined with **Vibroskop 400** a complete result report with dtex/denier is created.

Measuring range of force:

0 - 500 cN (g)
0 - 1000 cN on request

Measuring range of elongation:

Maximum 1000% at 10 mm gauge length

Gauge length:

Variable from 5 to 50 mm

Testing speed:

0.5 to 300 mm/min

Pretensioning:

Is done via Vibroclips

Calibration:

The instrument is calibrated by an integrated periodic automatic calibration procedure.

Accuracy:

Force: better than 1%
Elongation: ± 0.005 mm
(corresponding to specifications of ISO, ASTM, AFNOR, BISFA and DIN)

Specifications:

CRE-type according to DIN EN ISO 5079, ASTM D 3822, BISFA, AFNOR G 07-008 with automatic test procedure

Programmability:

With an integrated keyboard Vibrodyn 400 is programmable, e.g. definition of standard testing procedures, etc.

Displays:

Easy to read digital display with 4 digits for elongation in % and tenacity in cN/tex (g/den)

Evaluation software:

Providing display of linear density, tenacity (cN/tex, g/den), elongation, force, young modulus and elasticity modulus, tenacity-elongation graph, histograms with the corresponding printouts.

Main supply:

220/110 V $\pm 10\%$,
50/60 Hz, 40 W

Dimensions:

Height:	530 mm
Width:	410 mm
Depth:	570 mm
Weight:	21,5 kg

Data Output:

For on-line connection to IBM- or compatible personal computer through a Lenzing interface including Lenzing test software

Also available:

Device to test fibers in the wet state.