



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

**Vibrodyn 500** has been developed to cover the wide spectrum of requirements in tensile testing of single fibers. Programmable microelectronics guarantee maximum flexibility.

The instrument is „one button operated“ for easy and fast handling. Thereby, any operator influence is avoided, which means optimum accuracy and reliability of results. **Vibrodyn 500** 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 500** is the choice for producers who are looking for a flexible and economic instrument for testing of tensile properties. Its measuring range fulfils the requirements for testing of all common fibers.

In combination with **Vibroskop 500**, the titer (dtex/den) of the tested fiber is determined and the result thereof is thereafter used for the tensile test with **Vibrodyn 500**.

### 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. The tenacity test is initiated by pressing the operation button directly on the instrument. It is recorded by the computer in relation to the actual linear density provided by **Vibroskop 500** or to the nominal titer.

### Results:

The evaluation software generates both graphical and numerical results reports of tenacity (cN/tex, g/den), elongation, force, young modulus and elasticity modulus. Combined with **Vibroskop 500** a complete report with the measured titer (dtex/den) 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 pretension weights (Vibroclips)

### Calibration:

By an integrated 100 g weight (automatically operated by electromagnetic force), accuracy  $\pm 0.25$  %

### Accuracy:

Force:  $\pm 0.5$  %  
Elongation:  $\pm 0.1$  %  
(according 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:

Either by means of a touch display or directly in the software program

### Displays:

Easy to read digital display with 4 digits either for elongation in % and tenacity in cN/tex or 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.

### Power supply:

230 / 115 VAC  $\pm 10$  %, 50 / 60 Hz, 150 W

### Dimensions:

Height: 550 mm  
Width: 410 mm  
Depth: 570 mm  
Weight: 33 kg

### Data Output:

Ethernet

### Optionally available:

- Device to test fibers in the wet state
- Cycle test function

Technical data and pictures are subject to change!

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quality improvement