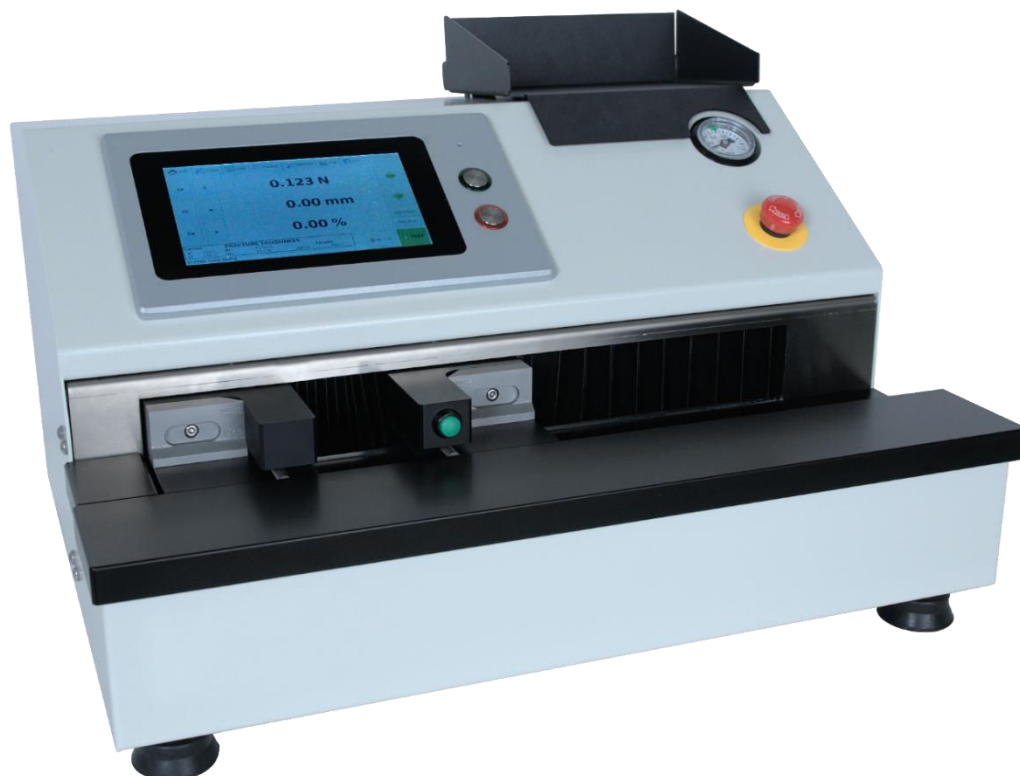# Tensile Tester

horizontal

Code: E.207.xxx

Usage

To determine the tensile resistance in dry or wet state, elongation and tensile energy absorption (TEA) in paper or tissue.
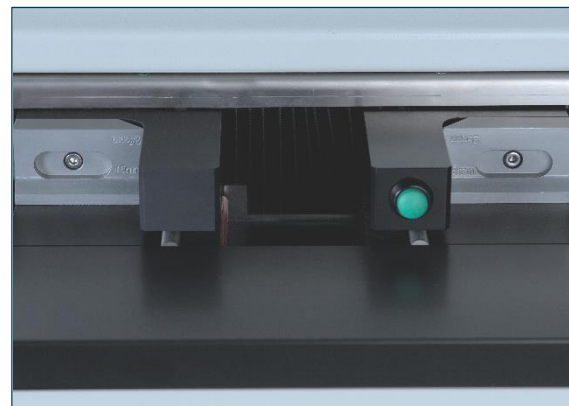
Applicable standards

- ISO 1924-2
- UNE-EN ISO 12625-4 / 5
- TAPPI T456
- TAPPI T494
- PAPTAC D34
- BS4415 / 2
- etc.

Touchdisplay & auxilliary buttons

Measuring clamps

Device description

This sturdy machine is easy to operate due to its touchscreen and the clear control buttons. The software has many pre-installed tests e.g. standard 100 mm tensile test for 15 mm stripes or the wet tensile test with 50 mm stripes for tissue. It comes with one load cell of 150, 500 or 1 000 N max. load. The pneumatically driven clamps have an automatic sample detection or can be started manually by a start button directly on the clamp holder. This is useful for transparent sample tests. The maximum distance of the clamps is 300 mm. It has an RS 232 interface and a USB connector for maintenance and a printer connection. The device comes with different sample supports e.g. wet paper basket or a support for tensile tests (180 mm/100 mm). The test speed is adjustable from 0.2 to 330 mm/min.

Process description

After pre-selecting the desired test on the touchscreen, the clamps drive into position. Now the sample support is placed into the space between the clamps and the sample is placed, which is detected automatically and the clamps close. Acc. to the test the sample is either watered for the pre-set time, pulled out of the water and stretched till it breaks or it is directly stretched. The figures, curves, statistics with max, min, mean and standard deviation are displayed and can be printed. The clamps open and return into start position automatically. The software comes with preinstalled tests as described in the standards. Customized tests can be set. All parameters e.g. testing speed, testing length, breaking and pre-load levels can be adjusted individually.

Specifications

- easy operation due to touchscreen controls
- sample detection and return into initial position automatically
- test speed adjustable from 0.2 to 330 mm/min
- multiple safety installations (limit switch, photocell barrier, emergency switch)
- RS 232 and USB interface
- water or standard tensile tests
- water bath for wet tensile tests: 50 mm wide stripes can be measured.
- from 50 up to 180 mm distance between the clamps is selectable.
- clamps can be used for 15 mm, 25 mm or 50 mm wide samples.
- accuracy: < 1% of applied force (between 2% and 100% of the FS)
- resolution: force: 0.004% of the FS
- travel ± 0.01 mm
- software can be set to different languages

Connections

- Electricity: 220/110 V, 50/60 Hz
- Air: 600 kPa

Models

Code	Device
E.207.T.150	Tensile Tester horizontal with 150 N load cell
E.207.P.500	Tensile Tester horizontal with 500 N load cell