

# Vertical Tensile Machine

Product code [RL-VTT-A](#)

## RYCOLAB



Figure: Tensile tester with manual clamps and touch screen

### Usage

For the determination of force, tensile resistance, elongation and tensile energy absorption in paper and tissue.

### Applicable standards

ISO 1924/1, ISO 1924/2, ISO 12625-9, UNE-EN ISO 12625-5, UNE-EN ISO 527-3, TAPPI T456, T494, T549, BS 4415/2, DIN 53 134, etc..

### Characteristics

This tensile tester is easy to operate due to its touch screen and the clear control buttons. Its software has different pre-installed tasks like standard 100 mm tensile test for 15 mm stripes or 180 mm tensile test. The pneumatic driven clamps are optional, as standard delivery the machine comes with hand operated clamps. Separate Start / Stop buttons for easy use. The maximum distance between the clamps is 300 mm. It has a RS 232 interface and a USB connector for maintenance work and printer connection. The test speed is adjustable between 0.2 and 750 mm/min.

### Test description

The user chooses the test to be performed on the touch screen. The clamps are automatically moved to the starting position and the sample is clamped between the upper and lower clamp. According to the delivery this can be done manually - or optionally with pneumatic clamps. By pushing the Start button the upper clamp moves and the test sample is stretched until the sample breaks. The figures like force, elongation, curves, statistic with max, min, mean and the standard deviation are shown on the touch screen and can be instantly printed. The clamps return automatically into start position after testing.

The software comes with the pre-installed tests as they are described in the standards. Company specific tests can be set as well. All the parameters like testing speed, testing length, breaking- and pre-load levels can be adjusted individually. The software can be set into different languages.

### Specifications

- Easy to operate due to touchscreen controls
- Sample width: 15, 25mm or 50mm (selectable)
- Sample length: 100 mm (acc. ISO 1924-2 and 3) or 180 mm (acc. ISO 1924-1)
- Sample length can be selected between 50mm and 250mm
- Automatic return to starting position after sample break.



Measure



Improve



Service



Manual clamps



Pneumatic clamps

- Testing and approaching speeds between 0.2 and 750 mm/min.
- Measuring range from 0 to 1.000 N for VTM-100(L) models and from 0 to 5.000 N for VTM-500(L) models.
- Maximum travel between clamps: 500 mm and 750 mm
- Display of tensile force, elongation, breaking length, TEA (Tensile Energy Absorption),
- Curves, Statistical functions like mean, max, min, standard deviation...etc.
- RS 232 and USB connection
- Accuracy: < 1% of the applied force
- Resolution: Force: 0.004%, Travel:  $\pm 0.01$  mm
- Windows based software
- CE mark

## Dimensions

	Net	Gross
Width	480	600
Depth	410	600
Height [mm]	900	1200
Weight [kg]	45	70

## Connections

Electricity: 110-230 V, 50-60 Hz AC

Air: 600 kPa