The choice of the load cell and the clamps is of the utmost importance for a correct performance of the test according to the strength of the samples and to the reference standard.

Our Strength Testers can fit load cells with different range and precision, for example, on code 2515 the operator can fit load cell 50.000 N to test kevlar belts, and then replace it with a load cell 20 N to test elastomers with low breaking load (ex. 30 cN). Working within 10% of the load cell capacity, the precision of the strength reading can be improved ten times.

Load cells can be replaced in a fast (a couple of minutes) and easy way, since they need to be calibrated only the first time they are used, while they are automatically identified by the strength tester at the subsequent changes.

For all companies operating ISO 9001, Mesdan offers a service of calibration of the Strength Tester which can be requested by customer when purchasing the instrument, and subsequently through a contract of periodical verification.

The unique design and the robust construction guarantee an effective clamping of the sample to test without altering its characteristics, even in case of slippery samples, or at the maximum capacity.

Especially, pneumatic clamps are suitable to test samples with a strength up to 3000 N since they eliminate the risk of damaging the sample during the clamping with the subsequent invalidation of the test itself (in case of slippery fabrics with resistance around 3000 N, we suggest the use of mechanical clamps which avoid the slippage between clamps).

A vanguard electronics supporting an outstanding software developed in close co-operation with the end-users allows testing the strength of different textile materials - with precision and care - with simplicity and productivity - with flexibility and in compliance with the international standards - with the highest repeatability of the results.

A diffused network of representatives and service centres spread all over the world offers a qualified consulting service helping customers to choose the configuration of the instrument and guaranteeing a skilled and prompt after-sale service.
**Double column Tensolab**

- **Maximum capacity** up to 50,000 N and a wide range of pneumatic and mechanical clamps.
- **Hysteresis loop in compliance with the international standards.**
- It can use different load cells easy to change with maximum range 3000 N, and a huge range of pneumatic and mechanical clamps.

**Thanks to this method, the operator can set the test of hysteresis loop tests in compliance with ISO, ASTM, BS, DIN, IWS, UNI and M&S standards.**

**An on-line guide gives the operator information on the chosen standard.**

Currently, the available modules are in excess of 30 and allow performance of traction tests on yarns, hanks, fabrics, non-wovens, geotextiles, ropes, compression and performance tests; strength and seam slippage tests; tearing tests; hysteresis loop tests in compliance with UY, ASTM, BS, DIN, IWS, UNI and M&S standards.

The hysteresis loop tests can be performed with load cells, pneumatic and mechanical clamps complying with all international standards, and can be personalized by the enduser according to his specific needs.

**The program works in several languages, and all fields of the Data Bank can be personalized by the enduser according to his specific needs.**

**Software**

- For Windows environment with many available modules complying with the international standards.
- Not available for 2512B/D.

**Accessories - Optionals**

- Load cells, pneumatic and mechanical clamps complying with all international standards, but switch for pneumatic clamps, PC and printer.

**Temperature during functioning**

- from 10°C to 35°C

**Storage temperature**

- from -20°C to 60°C

**Work humidity**

- from 10% to 90% without condensing

**Power supply**

- 110 / 220 V - 50 / 60 Hz

**Dimensions**

- 61 x 60 x 134 cm

**Weight**

- 83 Kg

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**Single column Tensolab**

**Strength Testers**

- movement resulting from a ball bearing screw, it is controlled by a software which runs all the functioning phases.

- The software is composed of three main sections: control program (of machine functions), data storage program, program for graphical representation.

- The operator can perform generic tests which can be set as desired at all parameters, or perform graded tests choosing the module related to a specific standard allowing selection of only the parameters referred to in that standard, and making reports and graphs in accordance to the same.

**Software**

- Pc dependent

- Software for Windows environment without available modules complying with the international standards.

**Accessories - Optionals**

- Foot switch for pneumatic clamps, PC and printer.

**Temperature during functioning**

- from 10°C to 35°C

**Storage temperature**

- from -20°C to 60°C

**Work humidity**

- from 10% to 90% without condensing

**Power supply**

- 110 / 220 V - 50 / 60 Hz

**Dimensions**

- 61 x 60 x 134 cm

**Weight**

- 83 Kg