NANNETTI

LABORATORY BENDING TEST MACHINE

FLS.T series - 1000/3000 kg

DESCRIPTION

Tablet instrument, made of powder coated steel, with precision electronics for the determination of the breaking load (max load) on ceramic or similar samples.

Semi-automatic, it is equipped with a stainless steel surface on which are positioned two oscillating supports (knives), mechanically moved and manually and individually adjustable, which receive the sample to be tested.
The adjustment is made with the aid of millimeter reference indices.
The knife placed in the upper part descends, pressing on the sample until it breaks.
This descent takes place in automatic mode, as required by the regulations and the loading speed is electronically controlled.

With this instrument it is possible to determine the flexural strength, the modulus of rupture, and the bending curve of the sample by operating according to the Standards:
UNI EN ISO 10545-4 | ASTM C 648 - 84 | DIN 51030 | EN 100 | EN12825

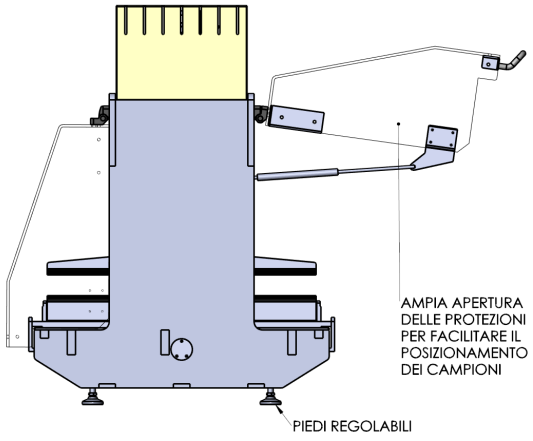
TECHNICAL SPECIFICATIONS

- **1000 kg** load cell (with precision of **10 gr.** Up to full scale), easily interchangeable *(only FLS.1000 model)*
- **3000 kg** load cell (with precision of **100 gr.** Up to full scale), easily interchangeable *(only FLS.3000 model)*
- electromechanical drive
- programmable double speed of the upper knife (outward / return and work)
- programmable applied load
- storage (50 slots) of the basic parameters of the samples to be tested[1]
- programming functions and test results managed and displayed on the 7" touchscreen
- USB port for exporting test data
- the lexan protections, both front and rear, are equipped with safety micro switches that stop the cycle of the machine in case of opening.
- the adjustable articulated feet perfectly level the instrument, and facilitate the positioning of the samples reducing their lifting.

ELECTRONIC UNIT

The management of the test is entrusted to an electronic control unit, which will give the final result, as modulus of rupture, expressed both in Newton/mm² and in Kg/cm² and as a breaking load expressed in both Newton and Kg.

There is also a manual function in which you can set the thickness of the tile and the weight to be subjected to it. The machine will adjust and maintain the pressure applied on the tile.



1 *therefore, by performing routine control tests, it is enough to recall the size to be tested from the memory, without having to reset the data necessary for the calculation.*

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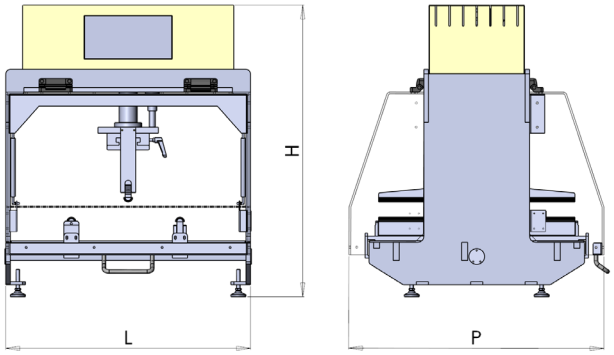
MODELS RANGE



		MAX STRENGTH	SAMPLE SIZE MIN	SAMPLE SIZE MAX	EXTERNAL DIMENSIONS	WEIGHT	POWER	VOLT	HERTZ
		[kG]	[mm]	[mm]	L x P x H [mm]	[kG]	[kW]	[V]	[Hz]
CODE: FLS.700.1	MODEL 700	1000	100 x 100	700 x 700	870 x 920 x 1030	220	0,5	230	50/60
CODE: FLS.1000.1	MODEL 1000		150 x 150	1000 x 1000	1200 x 1220 x 1030	320			
CODE: FLS.1300.1	MODEL 1300		150 x 150	1300 x 1300	1500 x 1520 x 1030	420			
CODE: FLS.700.3	MODEL 700	3000	100 x 100	700 x 700	870 x 920 x 1030	320	0,7	230	50/60
CODE: FLS.1000.3	MODEL 1000		150 x 150	1000 x 1000	1200 x 1220 x 1030	420			
CODE: FLS.1300.3	MODEL 1300		150 x 150	1300 x 1300	1500 x 1520 x 1030	520			

OPTIONAL

- kit to identify the degree of elasticity of the sample to be tested.[1]
  During the test the data are automatically acquired and saved on USB media which can then be inserted into a PC for the processing of an Excel graph.
- 60 or 110 kg load cell, interchangeable, for tests on “green” or “raw dried” tiles
  In this case the machine works with an accuracy of 10 gr., up to a force, exerted to break the tile to be tested, of 60 or 110 kg (depending on the load cell that has been mounted).
- simultaneous movement of the lower support knives
  In this case the machine is equipped with a single handwheel mechanism, operated manually, which adjusts both the lower knives at the same time
- kit per prova carico statico
  secondo normativa EN12825
- kit per prova ASTM C 648
- kit per piccoli formati 18/48 - 48/95 mm

1 *This is very important since it allows to optimize the formulation of the mixtures in the production of tiles. It has been demonstrated that a tile with a low mechanical resistance value does not always break more easily than one with a high mechanical resistance; this precisely in function of its elasticity.*