

COMPRESSION AND FLEXURAL TESTING MACHINES WITH DUAL MEASURING RANGE FOR CEMENT AND MORTAR SPECIMENS, BRICKS, ROCKS, REFRACTORIES etc.

STANDARDS: EN 196-1 / EN ISO 679 / ASTM C109, C348, C349
 NF P18-411, P15-451 / UNE 80101 / DIN 1164
 BS 3892, 4550, 4551

These testing machines foresee a dual measuring range in the same testing chamber. The two ranges can be used alternatively and are suitable to perform:

- Flexural tests on cement prisms 40,1x40x160 mm (selecting the low capacity range)
- Compression tests on portions of prism 40,1x40x160 mm broken in flexure, cubes side 40, 50, 70, 100 mm 2", cores with max. height of 180 mm (selecting the nominal range)

by using the suitable compression devices described in next pages (accessories E170 - E172-01)

The machines with digital readout are equipped with "two suitable pressure transducers" granting the Class 1 from 1/10 on both the measuring ranges.

The measuring range 0 - 15kN can be also used for compression tests on specimens with expected low strength values.

- Two columns high stiffness frame.
- Max. vertical daylight between platens: 185 mm
- Platens diameter: 153 mm
- Ram travel: 45 mm approx.
- Accuracy: Grade 1 starting from 1/10 of the scale for both the ranges.
- Two gauges dia. 200 mm:
 range 0-300kN, subdiv. 2,5kN
 range 0 - 50kN, subdiv. 0,5kN
- Supplied complete with lower compression platen and coupling piece to easily fix the compression devices.
- Power supply (motorized models):
 230V 1ph 50Hz 750W
- Weight: 310 - 340 kg



E161-01 + E170 + E172-01 + E161-12



E160 + E161-11 + E170



E156 + E170

COMPRESSION / FLEXURAL

Model	Dual range kN	Manual	Motorized	LOAD MEASURING SYSTEM		
				Gauges	Cybertronic mod. C109 (pag.)	Servotronic mod. C104 (pag.)
E152	300/50	•		•		
E156	300/50		•	•		
E160	500/15		•		•	
E160-01	250/15		•		•	
E161-01	250/15		•			•
E161-03	500/15		•			•

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ACCESSORIES FOR FLEXURE / COMPRESSION:

E172-01

FLEXURE DEVICE for 40,1x40x160 mm mortar specimens. EN 196-1, EN/ISO 679 See pag...

E170

COMPRESSION DEVICE for portions of prism 40,1x 40x160 mm broken in flexure. EN 196, EN/ISO 679, ASTM C349. See pag...



E170



E172-01

E171

COMPRESSION DEVICE for cubes 50 mm and 2" side. ASTM C109. See pag...

E171-01

COMPRESSION DEVICE for cubes 70,7 mm side. BS 4550. See pag...



E171



E171-01

E172-02

FLEXURE DEVICE for 40x40x160 mm mortar specimens. ASTM C348. See pag...



E161-05 DISTANCE PIECE, 50 mm high

E161-06 DISTANCE PIECE, 25 mm high

Note: the compression devices do not require any distance piece.

C127 GRAPHIC PRINTER on thermo-paper on board for Cybertronic and Servotronic models

C127-11 THERMO-PAPER roll for printer (pack of 10 rolls)

E161-12 SAFETY GUARDS, polycarbonate made, to CE Safety Directive, complete with hinges and lock

C121-51 STOP SWITCH on safety guards. See pag...

C097-05

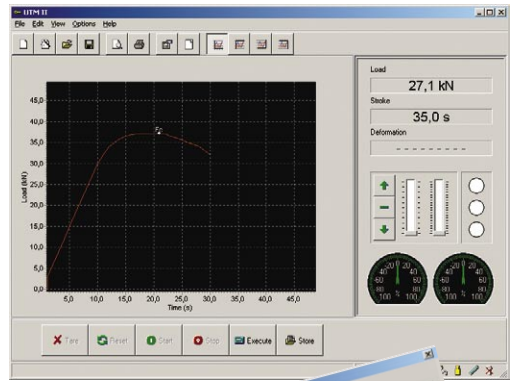
CLASS 1, starting from 1% of the full range. With a special calibration procedure it is possible to grant Class 1 practically on the full range of the compression machine. Applicable only on digital machines.

E163

SOFTWARE for compression tests. Developed for the managing and the remote control from a PC. To be used with Cybertronic models. See pag...

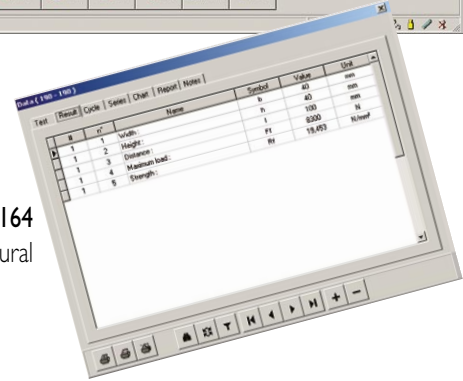
E164

SOFTWARE for flexural tests. Developed for the managing and the remote control from a PC. To be used with Cybertronic models. See pag...



E163

Software compression

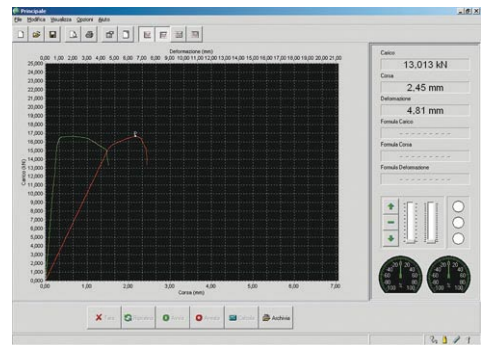


E164

Software flexural

C123

SOFTWARE "Servonet" for compression and flexural tests. Developed for the fully automatic managing and remote control from a PC. To be used with Servotronic models. See pag...



C123

Software "servonet"

H009-01

PERSONAL COMPUTER, LCD 17" monitor; keyboard, mouse, cables. The supply of the PC includes the installation of the software.

E161-11 BENCH, to hold the compression frame.

C115-01

TWO WAY HYDRAULIC VALVE, connected to the Cybertronic machine, to activate a second frame. Technical details: see pag.



C115-01



C115-02

C115-02

TWO WAY HYDRAULIC VALVE, connected to the Servotronic machine, to activate a second frame. See pag...



COMPRESSION AND FLEXURAL TESTING MACHINE “HIGH PERFORMANCE” WITH DUAL TESTING CHAMBER AND TWO INDEPENDENT MEASURING RANGES 250 KN AND 15 KN WITH LOAD CELLS

STANDARDS: EN 196-1 / EN ISO 679 / ASTM C109, C348, C349 / NF P18-411, P15-451 / UNE 80101 / DIN 1164 / BS 3892, 4550, 4551

This testing machine of high performance, advanced solutions and top quality components is equipped with two load chambers with two independent measuring ranges. It is suitable to perform:

- Flexural tests on cement prisms 40,1x40x160 mm (with the range 0 - 15 kN)
- Compression tests on portions of prism 40,1x40x160 mm broken in flexure, cubes side 40, 50, 70, 100 mm 2”, cores with max. height of 180 mm (with the range 0 - 250 kN)

by using the suitable compression devices described in next pages (accessories E170 - E172-01)

The applied load is measured by two strain gage load cells (15kN and 250kN) at high accuracy.

This solution eliminates the weights of the piston and lower compression platen, packing set frictions etc., granting very high accuracy (max. error within +/- 0,5%)

The load chamber 0 - 15 kN permits very accurate tests on specimens having low strength (both in compression and in flexure).

- Max. vertical daylight between platens: 189 mm
- Platens diameter: 165 mm
- Ram travel: 35 mm approx.
- Accuracy: Grade 1 starting from 1/10 of the scale for both the ranges.
- Safety guards to CE Directive, polycarbonate made, with hinges.
- Supplied complete with lower compression platens and coupling pieces to easily fix the compression devices (see accessories).
- Dimensions of the frame: 1300x400xh1500 mm approx.
- Power supply: 230V 1ph 50Hz 750W
- Weight: 400 kg approx.



E181 with compression devices



E183 + H009-01 with compression devices

COMPRESSION / FLEXURAL

Model	Dual range kN	LOAD MEASURING SYSTEM	
		Cybertronic mod. C109 (pag.)	Servotronic mod. C104 (pag.)
E181	250/15	•	
E183	250/15		•

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