

# Modulus of Rupture—MOR/5-TS

## Machines for Flexural Tests

Indispensable for producers of ceramic floor and wall tiles when checking production processes and finished products. Can also be used by producers of sanitaryware, tableware and technical porcelain; in research labs, in Technical and University labs, and wherever it is necessary to determine the flexural breaking load of a large number of different raw materials, broken down into sizes that can be positioned on the machines.

## MOR/5-TS Series Electronic models

Standardized devices for determining the flexural breaking load and modulus of green, or dried, or fired ceramic tiles. Without using any additional accessory.

In accordance to the **UNI EN ISO 10545-4** norm, and **ASTM C648-84** (with accessory kit)  
Minimum tile size 10x10 cm.

### General features:

- Breaking blade operated by an electro-mechanical system
- System for detecting applied load, by means of highly reliable strain gage cells
- Automatic testing cycle
- Automatic tareing
- Digital reading with wide touch screen display, in 5 languages (- I - GB - F - D - E -)
- Selectable measuring unit in Kg or Newton
- Automatic determination of the modulus of rupture in Kg/cm<sup>2</sup>, or Newton/mm<sup>2</sup> and the breaking effort in Kg. or N.
- Possibility to re-enter the value of maximum thickness of the test after the trial for modulus of rupture re-calculation.
- 30 reference sizes that can be stored
- Storage of the last 29 tests carried out.
- Descent velocity of the breaking blade adjustable by the control panel, with the possibility of automatically setting up the standardized increase load in accordance to the UNI EN ISO 10545-4 standard, and with display graphic indication.
- Fast approach and fast end-of-test return.
- Methacrylate frontal protection with safety microswitch
- Output: serial RS 232 C for connection to PC or printer
- Auxiliary output 230V max 4A
- Electric supply: 230V single-phase 50/60Hz
- Scale: 0,5—800 Kg with a reading of 0,01 Kg (10 g) across the full range. Accuracy  $\pm 0.005$ kh of read value (Minimum breaking load that can be obtained, 0,5 Kg)



**01CI1513 MOR/5-TS/65** Suitable to make tests up to the size of 65x65 cm, Supplied with 65cm breaking blade and tile supports. The instrument is standardized up to the size of 65x65 cm. Overall dimensions: 108x85x78 cm, Net weight: 113 Kg

**01CI1514/2 MOR/5-TS/95** Suitable to make tests up to the size of 95x95 cm, Supplied with 60cm breaking blade and tile supports. The instrument is standardized up to the size of 95x95 cm. Overall dimensions: 142x116x78 cm, Net weight: 183 Kg

**01CI1515/2 MOR/5-TS/125** Suitable to make tests up to the size of 105x125 cm, Supplied with 105cm breaking blade and tile supports. The instrument is standardized up to the size of 105x125 cm. Overall dimensions: 172x126x78 cm, Net weight: 240 Kg

**01CI1516 MOR/5-TS/185** Suitable to make tests up to the size of 125x185 cm, Supplied with 125cm breaking blade and tile supports. The instrument is standardized up to the size of 125x185 cm. Overall dimensions: 232x147x78 cm, Net weight: 360 Kg

# Modulus of Rupture—BLM Series

## BLM SERIES (Breaking Load Machine)

Standardized devices for determining the flexural breaking load and modulus of green, or dried, or fired ceramic tiles. Without using any additional accessory.

In accordance to the **UNI EN ISO 10545-4** norm.

Minimum tile size 10x10 cm.

### General features:

- Breaking blade operated by an electro-mechanical system
- System for detecting applied load, by means of highly reliable strain gage cells
- Automatic testing cycle
- Automatic taring
- Control board with keyboard and LCD display
- Selectable measuring unit in Kg or Newton
- Descent velocity of the breaking blade adjustable by the control panel, with display graphic indication
- Fast approach and fast end-of-test return.
- Output: serial RS 232 C for connection to PC or printer
- Methacrylate frontal protection with safety micro-switch
- Auxiliary output 230V max 4A
- Electric supply: 230V single-phase 50/60Hz
- Scale: 0,5—800 Kg with a reading of 0,01 Kg (10 g) across the full range. Accuracy  $\pm 0.005$ kh of read value (Minimum breaking load that can be obtained, 0,5 Kg)



**01CI1530 BLM/650 model** Suitable to make tests up to the size of 65x65 cm, Overall dimensions: 102x85x78 cm, Net weight: 113 Kg

**01CI1532 BLM/950 model** Suitable to make tests up to the size of 95x95 cm, Overall dimensions: 116x136x78 cm, Net weight: 195 Kg

**01CI1535 BLM/1250 model** Suitable to make tests up to the

### Accessories:

**10CI2388/1** Serial alphanumeric 24 column printer

**01CI1517** Communication and data acquisition software

**01CI1514/5** Complete plate to take 48—95mm and 18—48mm tile sizes in accordance with UN EN ISO 10545-4. Suitable for use on both MOR/5-TS and BLM systems to carry out trials on small samples. (pictured right).

**01CI1514/7** Kit to carry out tests according to **ASTM C648-98**

