

## S199 AUTOMATIC, PROGRAMMABLE PROCTOR | CBR COMPACTOR WITH MICROPROCESSOR HIGH PERFORMANCE

STANDARDS: EN 13286-47 | ASTM D698, D1557, D1883  
 AASHTO T99, T180, T193 | BS 1377:4, 1990, 1994  
 NF P94-093, P94-066 | DIN 18127  
 UNE 7365, 7255, 103-501-94 | CNR UNI 10009  
 CNR N. 29, 69 | DUTCH RAW | AS 1289 and most  
 International Standards.

Designed to compact Proctor and CBR specimens, it ensures an extremely uniform compaction degree, granting reliable and repeatable test results.

The microprocessor software allows to select and perform different compaction cycles in a fully automatic system, by strictly meeting the mentioned International Standards.

The blows are automatically distributed as requested by the selected Standard, with turntable rotation and rammer displacement through photoelectric cell sensors and microprocessor. Top quality components and high accuracy mechanical workings grant very long life also under intensive utilisations.

The digital control panel is separate from the machine and it can be fixed to the wall or mounted on a bench.

The high resolution graphic display (blue negative) 320x240 pixels visualizes selected Standard, total number of blows, effected and remaining ones to end the test, and execution of each layer.

The compactor is easy to use, friendly menu driven, versatile, of simple and practical maintenance.

The user can **select and memorize up to 10 personalized test cycles**, that can be later on modified or replaced by other ones. This is a very important function, because it allows to update the Compactor to new Standards, or any Standard not included in the microprocessor, or for research purposes.

The original lift system of the rammer can be selected at 12" or 18", or at 300 or 450 mm, granting a correct and constant fall height. Rammer drop speed: 1 blow each 2 seconds.

The compactor accepts moulds having  $\varnothing$  4" and 6", 100 and 150 mm, both Matest made or from other producers, thanks to its universal mould fixing system.

The machine is supplied **without rammers** to be ordered separately and selected according to the desired Standard (rammers are interchangeable).

Not sellable in CE markets

(see accessory: safety guards mod S199-11)

**Power supply:** 230V 1ph 50Hz 500W

**Dimensions:** 610x470xh1710 mm

**Weight:** 200 kg approx.



**S199** with mould and rammer

### NEEDED ACCESSORIES

**S199-06** STANDARD RAMMER  $\varnothing$  50  $\pm$  0.2 mm  
 and 2500  $\pm$  10 g weight

**S199-07** MODIFIED RAMMER  $\varnothing$  50  $\pm$  0.2 mm  
 and 4535  $\pm$  5 g weight

Conforming to: EN 13286-47 | BS 1377:4 | DIN 18127  
 UNE 7255, 7365, 103-501-94 Standards.

OR:

**S199-08** STANDARD RAMMER  $\varnothing$  50.8  $\pm$  0.13 mm  
 and 2491,25  $\pm$  1.25 g weight

**S199-09** MODIFIED RAMMER  $\varnothing$  50.8  $\pm$  0.13 mm  
 and 4537  $\pm$  3 g weight

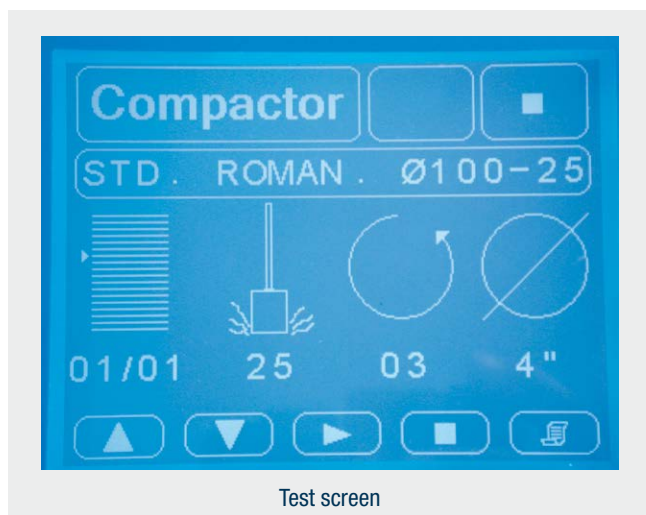
Conforming to: ASTM D558, D559, D698, D1557, D1883  
 NF P94-066/93 | CNR UNI 10009  
 CNR N. 69 | ASHTO T99, T180, T193

OR:

**S199-13** STANDARD RAMMER,  $\varnothing$  50  $\pm$  0.4 mm  
 and 2700  $\pm$  10 g weight

**S199-14** STANDARD RAMMER,  $\varnothing$  50  $\pm$  0.4 mm  
 and 4900  $\pm$  10 g weight

Conforming to: AS 1289 (Australian) Standard.



## ACCESSORIES

**S199-11** SAFETY GUARDS to CE Directive.  
If the door is opened when the Compactor is working, it stops automatically.

As alternative:

**S199-12** SOUNDPROOF SECURITY CABINET, steel made with microswitch, complying to CE Safety Directive, lined with sound-proofing material for noise reduction. If the door is opened while the Compactor is working, it automatically stops.

**Dimensions:** 740x730x1900 mm

**Weight:** 80 kg approx.

## SPARES

**S198-22** Calibrated rod holding the rammer.

**S198-23** Kit of two devices fixing the mould to the table.



**S199 + S199-12** with accessories

## AUTOMATIC PROCTOR | CBR COMPACTOR

### TECNOTEST MODEL

A selector switch enables the operator to choose type of compaction required (circular blow pattern for 4" or 100mm specimen moulds and double concentric circles for 6" or 150 mm specimen moulds). The number of blows is preset on the electronic microprocessor-based control panel.

The machine is designed for long-term operation and has built-in safety features (to CE Standards) to prevent it from being operated without the unbreakable transparent safety guard.

Thanks to its compact height design, the compactor is recommended for mobile laboratories.

**Power supply:** 230V 1ph 50Hz

**Dimensions:** 1760x590x400 mm

**Weight:** 220 kg approx.

## MODELS

### S199T AUTOMATIC COMPACTOR

**STANDARDS:** ASTM D698, D1557, D1883 | CNR N. 69 | CNR UNI 10009  
Complete with rammer diameter 2" and interchangeable weights of 5.5 and 10 lbs. Height of rammer drop adjustable: 12" or 18"

### S199T1 AUTOMATIC COMPACTOR

**STANDARD:** EN 13286-2

Complete with rammer diameter 50 mm and interchangeable weights of 2.5 and 4.5 kg

Height of rammer drop adjustable: 305 or 457 mm

### S199T2 AUTOMATIC COMPACTOR

**STANDARDS:** BS 1377, 1924

Complete with rammer diameter 50 mm and interchangeable weights of 2.5 and 4.5 kg

Height of rammer drop adjustable: 300 or 450 mm



**S199T**