

S199

Automatic, programmable PROCTOR / CBR Compactor with microprocessor, "high technology"

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 to 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, 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.



Data introduction screen

material testing equipment

S199-II



S199 with mould and rammer

The compactor accepts moulds having dia. 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-II)

Power supply: 230V 1ph 50Hz 500W

Dimensions: 610x470xh1710 mm

Weight: 165 kg



NEEDED ACCESSORIES:

S199-06 STANDARD RAMMER 50 +/- 0,2 mm dia.
and 2500 +/- 10 g weight

S199-07 MODIFIED RAMMER 50 +/- 0,2 mm dia.
and 4535 +/- 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 50,8 +/- 0,13 mm dia.
and 2491,25 +/- 1,25 g weight

S199-09 MODIFIED RAMMER 50,8 +/- 0,13 mm dia.
and 4537 +/- 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, 50 ± 0,4 mm dia.
and 2700 ± 10 g weight

S199-14 STANDARD RAMMER, 50 ± 0,4 mm dia.
and 4900 ± 10 g weight

Conforming to: AS 1289 (Australian) Standard.



Test screens



section S



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S199 + S199-12 with accessories

ACCESSORIES:

S199-11

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

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.

SPARE PARTS:

S198-22 Calibrated rod holding the rammer.

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



S199-07

S199-06

MATEST

material testing equipment

CALIFORNIA BEARING RATIO - CBR

STANDARDS: EN 13286-47 / EN 13286-4 / ASTM D1883 / AASHTO T193 / CNR UNI 10009 / UNE 103-502
 NF P94-078, P94-093, P98-231-1 / BS 1377:4, 1924:2

This method has been developed by the California State Highway Department, and is now accepted by almost all the International Standards in force. The test is aimed to the evaluation of the bearing capacity of soil for flexible pavement design in road construction. The compaction test can be performed both with the manual rammers and the automatic compactor mod. S199.



S201-05

section S



S200-01... CBR SET TO ASTM, AASHTO, CNR/UNI, UNE STANDARDS



402



S201 KIT... CBR SET TO NF STANDARD



S202 KIT... CBR SET TO BS, EN 13286-4 STANDARDS



S203 KIT... CBR SET TO EN 13286-47 STANDARD

The CBR equipment, steel made and plated against corrosion is available in different versions according to the various Standards in force.



S114

MATEST

material testing equipment

Description	Standards			
	ASTM D1883	EN	NF P94-078	EN 13286-4
	CNR UNI 1009	13286-47	NF P94-093	BS 1377:4
	UNE 103-502		NFP98-231-I	BS 1924:2
	AASHTO T193			
CBR mould complete with collar and perforated base:				
Dia. 6" (152,4 mm) x 7" (177,8 mm) height.....	S200-01			
Dia. 150 mm x 120 mm height.....		S203 KIT		
Dia. 152 mm x 152 mm height.....			S201 KIT	
Dia. 152 mm x 127 mm height.....				S202 KIT
Split CBR mould with collar and perforated base:				
Dia. 6" (152,4 mm) x 7" (177,8 mm) height.....	S200-13			
Dia. 150 mm x 120 mm height.....		S203-01 KIT		
Dia. 152 mm x 152 mm height.....			S201-01 KIT	
Solid base plate for CBR mould.....	S200-12	S194-15	S201-12	S202-03
Perforated base plate for CBR mould.....	S200-10	S194-14	S201-10	S202-10
Filter screen, stainless steel dia. 149 mm mesh 0,150 mm (ASTM n° 100).....				
	S200-02	S200-02	S200-02	S200-02
Spacer disc with "T" handle:				
Dia. 5 15/16" (150,8 mm) x 2,416" (61,4 mm) height.....	S200-03			
Dia. 149,5 x 36 mm height.....		S194-21		
Dia. 151 x 25,4 mm height.....			S201-02	
Dia. 151x36 mm height.....			S201-06	
Dia. 150x50 mm height.....				S202-07
Perforated (swell) plate with adjustable stem.....				
	S200-04	S194-23	S200-04	S200-04
Plein swell plate.....		S194-24		
Tripod (dial gauge support).....	S200-05	S194-26	S200-05	S200-05
Dial gauge 10 mm range, 0,01 mm subd.....	S376	S376		
Dial gauge 25 mm range, 0,01 mm subd.....			S377	S377
Annular surcharge weight 2270 g.....	S200-07			
Annular surcharge weight 2300 g.....			S200-07	
Annular surcharge weight 2000 g.....		S202-08		S202-08
Slotted surcharge weight 2270 g.....	S200-08			
Split surcharge weight 2300 g.....			S201-04	
Split surcharge weight 2000 g.....		S202-09		S202-09
Cutting edge.....	S200-09		S200-09	S200-09
Compaction rammer:				
Ø 50,8, mm fall height 457,2 mm, weight 4,54 kg.....	S188			
Ø 50, mm fall height 457,2 mm, weight 4,54 kg.....		S188-01	S188-01	S188-01
Straight edge 300x30x3 mm.....	S200-11	S200-11	S200-11	S200-11
Straight edge, cutting rim, 300x30x3 mm.....	S200-06	S200-06	S200-06	S200-06
Filter paper dia. 150 mm (pack of 100).....	S200-14	S200-14	S200-14	S200-14
Soaking tank 600x400x400 mm.....	S201-05	S201-05	S201-05	S201-05
Universal extruder (see pag. 384).....	S114	S114	S114	S114

