

CONE PENETROMETER METHOD FOR:

LIQUID LIMIT DETERMINATION

STANDARDS: UNI EN ISO 17892-12 | BS 1377:2 | NF P94-052-1

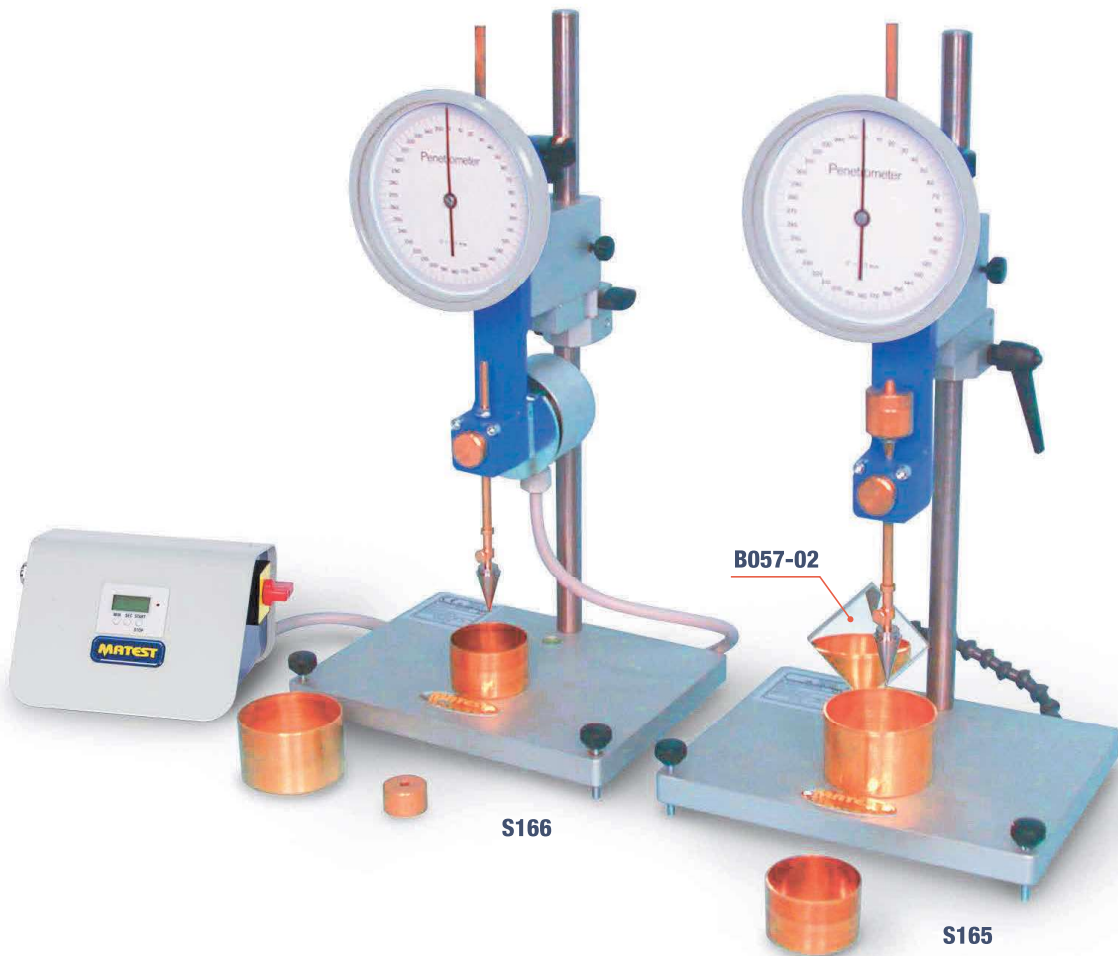
The test is based on the relationship between the moisture content at which clay soils pass from a plastic to a liquid state.

This value is obtained from the penetration capacity of the standard cone allowed to free fall into the sample for a period of 5 seconds.

SHEAR STRENGTH DETERMINATION

STANDARD: UNI EN ISO 17892-06

The cone penetrometer is also suitable to measure the shear undrained strength of undisturbed and reconstituted soil samples as per UNI EN ISO 17892-06 Standard.



MODELS

S165 CONE DIAL PENETROMETER

The cone penetrometer consists of:

- Aluminium base with levelling screws and spirit level.
- Chromed vertical rod with **micrometric vertical displacement device**.
- Dial gauge 150 mm diameter, graduated in 360°, division 0.1 mm
- Slider, brass made, with free fall, stop and release push button, automatic zero set.
- Stainless steel penetration test cone 35 mm long, 30° angle
- Weight 20 g
- Two brass cups \varnothing 55x35 mm and 70x45 mm

Dimensions: 220x170x(h)490 mm

Weight: 13 kg approx.

S166 SEMIAUTOMATIC CONE DIAL PENETROMETER

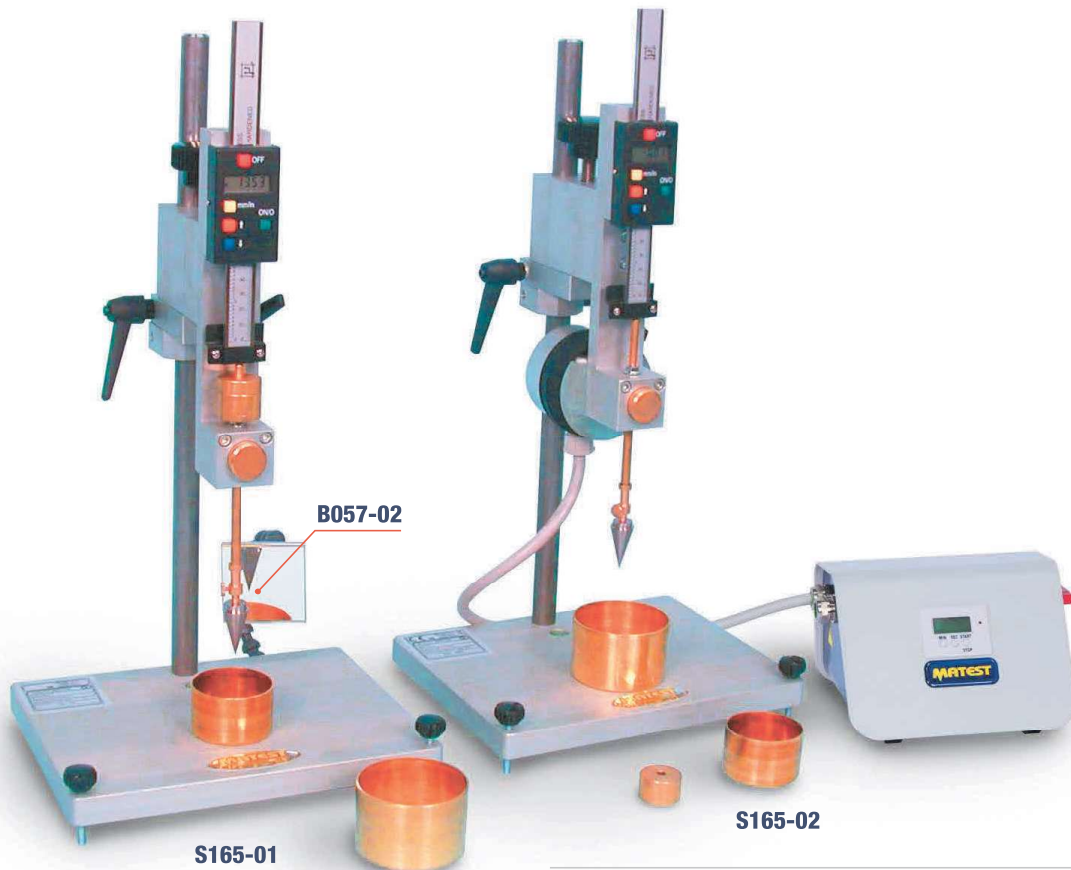
Basically structured as mod. S165, but equipped with a magnetic controller device with electronic digital programmable timer that automatically releases the plunger head and ensures free falling of the cone during the 5-seconds test.

Supplied complete.

Power supply: 230V 1ph 50-60Hz 200W

Dimensions: 220x280x(h)490 mm

Weight: 15 kg approx.



S165-01 CONE DIGITAL PENETROMETER

The cone penetrometer consists of:

- Aluminium base with levelling screws and spirit level.
- Chromed vertical rod with **micrometric vertical displacement device**.
- Digital readout of the penetration values.
- Readings in mm and inch, with 0.1 mm resolution. LCD 5 digits display, with zero set in any position.
- Power: 1.5V battery.
- Slider, brass made, with free fall, stop and release push button, automatic zero set.
- Stainless steel penetration test cone 35 mm long, 30° angle.
- Weight 20 g
- Two brass cups Ø 55x35 mm and 70x45 mm

Dimensions: 220x280x490 mm

Weight: 13 kg approx.

S165-02 SEMI-AUTOMATIC CONE DIGITAL PENETROMETER

Basically structured as mod. S165-01, but equipped with a magnetic controller device with electronic digital programmable timer that automatically releases the plunger head and ensures free falling of the cone during the 5-seconds test. Supplied complete.

Power supply: 230V 1ph 50-60Hz 200W

Dimensions: 220x280x490 mm

Weight: 15 kg approx.

ACCESSORIES for S165, S166, S165-01, S165-02

- S166-03** TEST GAUGE, to check the condition of the cone point 30° angle. According to UNI EN ISO
- S166-03N** TEST GAUGE, to check the condition of the cone point 30° angle. According to BS
- B057-02** MIRROR, to facilitate the height adjustment of the cone.
- S166-04** TEST CONE 60° angle and 60 g weight (liquid limit and shear strength tests).
- S166-05** TEST GAUGE, to check the condition of the cone point 60° angle.
- S166-06** WEIGHT, 320g to be added to the cone 30° angle, to get a total weight of 400 g (shear strength test).
- V122-08** SAMPLE CUP, aluminum, Ø 55 mm by 40 mm deep, to meet BS 1377:2 Specification

SPARES for S165, S166, S165-01, S165-02

- S166-01N** Test cone 35 mm long and 30° angle.
- S166-02** Weight 20 g to be added to the cone 30° angle, to get a total weight of 100 g
- V122-05** Brass cup Ø 55x35 mm
- V122-06** Brass cup Ø 70x45 mm

