



OPERATING MANUAL

Pocket Penetrometer HM-500



HM-500



HMA-15

INTRODUCTION:

This lightweight, direct-reading penetrometer gives instant information for classification of cohesive soils on site or in the lab. The operation is simple using the following steps.

OPERATING INSTRUCTIONS:

1. Move the ring towards the handle to the lowest reading on the scale. When the ring is properly located, it should rest against the lower edge of the instrument handle.
2. Check soil sample for strength classification:
Grip the handle and slowly push the piston with steady pressure into the soil up to the calibration groove, machined on the piston 1/4in from the end.
3. Read estimated unconfined compression strength directly in tons/ft² or in kilograms/cm² on the low load side of ring (away from piston end). Indicator sleeve holds its position after piston is released.
4. To clean interior, remove pin with allen wrench.
5. Readings are only estimates of actual strength.

ACCESSORIES:

The 1in diameter HMA-15 Penetrometer Adapter Foot attachment is used when measuring the compression strength of very soft soils. Since this accessory foot has 16 times the piston area of the regular 1/4in piston, the reading should be divided by 16 to get the correct estimated unconfined compressive strength of the materials.

To use adapter foot, after installation on penetrometer, grip the handle and push the piston with steady pressure into the sample up to the full thickness (1/4in) of the adapter foot. Read strength the same as in normal penetrometer operations, and divide by 16.

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