

PENNI 30 - PRESENTATION

Medium-Light Dynamic Penetrometer What is a penetrometer? Penetrometers are instruments used by soil specialists to carry out quick on-site measurements of the mechanical resistance of soils. By analyzing the results of penetrometer tests the mechanical properties of the underlying strata can be derived. How the test is done?

A 20 kg (or 30 kg) weight is dropped from a height of 20 cm on Ø22 mm pipes driving a conical tip (Ø35.6 mm) into ground.

The number of blows required to drive the cone 10 cm into the ground can be correlated to the soil's mechanical properties.

The test can reach depths of 10/12 meters, depending on the ground's geological make-up.

Why choose Penny 30?

Four years after its introduction in the Italian market, the PENNY 30 dynamic penetrometer is used by a large number of engineering companies and geologists, who find it a reliable instrument for measuring soil properties in the field. PENNY 30 is the only penetrometer that employs a flexible-cable mechanical transmission for hoisting the hammer-weight, which makes it practical, resistant, inexpensive and easy to use.

The following are the features that make PENNY 30 a winner in its field:

- limited dimensions
- easy to transport (it can be carried in separate parts provided with practical handles)

- fast set-up and operation
- mechanical power transmission through flexible cable (a unique feature)
- the anvil on which the weight falls is separated from the strike plate, which reduces vibrations
- striking frequency can be adjusted on the anvil's handle

- can be used by a single operator
- low cost of purchase

These features are highly appreciated when site investigation needs to be carried out in places that are difficult to access and where static penetrometers would be complicated to bring and set up for the test. PENNY 30 can be considered mid-way between hand-held penetrometers, which are seldom used any more, and heavy-weight dynamic penetrometers, much more costly and less practical.