

MODEL TO-567



Pavement Dynamic Cone Penetrometer

The Pavement Dynamic Cone Penetrometer (DCP) is a very robust instrument, designed for rapid in-situ evaluation of strength of sub-grade and the bases for roads and runway pavements. Continuous measurements can be made down to a depth of 800mm or, when an extension is fitted, to a depth of 1200mm. Where pavement layers have different strengths, the boundaries can be identified and the thickness of the layers determined.

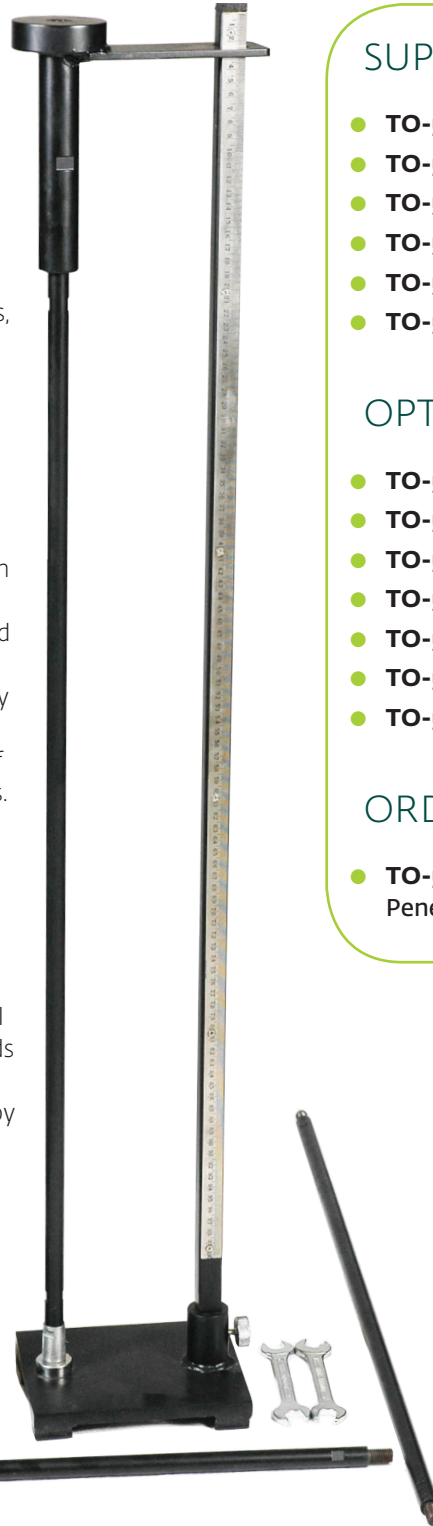
A typical test takes only a few minutes, so this instrument provides a very efficient method of obtaining information that would normally require test-pits. Correlations have been established between measurements with DCP and California Bearing Ratio (CBR) so that the results can be interpreted and compared with CBR specifications for pavement design. Agreement is generally good over most of the range but differences are apparent at low values of CBR, especially for fine grained materials.

The design of the pavement DCP is similar to the one described by Kleyn, Maree and Savage (1982) in their paper "The application of the pavement DCP to determine the bearing properties and performance of road pavements", published in proceedings of International Symposium on Bearing Capacity of Roads and Airfields, Vol.1. (The Norwegian Institute of Technology) and developed by TRRL, UK.

It incorporates an 8kg weight dropping through a height of 575mm and a 60° cone having a diameter of 20mm. It is supplied complete with assembly tools and weighs about 20kg.

The DCP needs three operators, one to hold the instrument, another to raise and drop the weight and a technician to record the results. The instrument is held vertically and the weight carefully raised to the handle limit and then allowed to fall onto the anvil.

This equipment is supplied with top bottom rod, handle, hammer, scale, cone and anvil with a wooden carrying case.



SUPPLIED AS STANDARD

- **TO-56701** Top and bottom rod
- **TO-56702** Handle
- **TO-56703** Hammer
- **TO-56704** Scale
- **TO-56705** Cone 60°
- **TO-56706** Anvil

OPTIONAL ACCESSORIES

- **TO-56701** Top and bottom rod
- **TO-56702** Handle
- **TO-56703** Hammer
- **TO-56704** Scale
- **TO-56705** Cone 60°
- **TO-56706** Anvil
- **TO-56707** Bottom rod

ORDERING INFORMATION

- **TO-567** Pavement Dynamic Cone Penetrometer with carrying case

Key features

- A simple and robust instrument for rapid in-situ measurement of the structural properties of road pavements.
- Provides fast and efficient method of obtaining information.
- For continuous measurements up to a depth of 800mm and 1200mm with the extension rod.
- Portable and can be accommodated in a carrying case.