Dynamic Probes





Applications

- Geotechnical investigation
- Environmental investigation
- Foundation engineering

Features

- Continuous penetration profile of ground strength
- Meets BS EN 1997-2:2007 Eurocode 7
- Meets BS 5930:2015 Code of practice for ground investigations

Accessories

- · Sacrificial or retrievable cone
- Drive head
- Rod & coupler
- Bottom connector

The Dynamic Probe test is used to determine the resistance of soils in situ to the dynamically driven penetration of a cone. Historically this has been in accordance with B.S. 1377: Part 9 but this has now been superseded by BS EN 1997-2:2007, Eurocode 7 Geotechnical design, ground investigation and testing.

The equipment consists of a 90° cone, which may be sacrificial or retained for recovery, a series of extension or driving rods, a torque wrench and a driving device.

There are two type of test: Heavy Dynamic Probing (DPH) and Super Heavy Dynamic Probing (DPSH). The dimensions of the cone and the mass and drop height of the driving weight are different for the two tests as shown below.

The extension rods used in the test are either 0.5 or 1 metre long, manufactured from 35mm diameter heat-treated alloy steel, with graduations marked every 10cm along their length. The rods are flush-jointed and provide a continuous string with a straight axis. The thread form has been specifically designed to resist the driving force. Rods are provided with spanner flats at both ends to enable easy connecting and disconnecting.

The driving device may be a purpose-designed Probing Rig or Automatic Trip Hammer.

Specifications Specification Specif		
Item	Heavy (DPH)	Super Heavy (DPSH)
Drop Height (mm)	50 ± 0.5	63.5 ± 0.5
Nom. Cone Area (cm²)	500 ± 10	750 ± 20
Cone Mantle Length (mm)	15	20
Cone Tip Length (mm)	43.7 ± 0.3	50.5 ± 0.5
Drive Rod Diameter (mm)	43.7 ± 1	50.5 ± 2
Drive Rod Mass (kg/m)	21.9 ± 0.1	25.3 ± 0.4
Drive Rod Diameter (mm)	35	35
Drive Rod Mass (kg/m)	6	8