

Field Dynamic Penetrometer

Standard: ASTM D6951-03

DYNAMIC CONE PENETROMETER

Model Number: SDCP-282



Dynamic Cone Penetrometer (DCP) is an instrument designed for the rapid in-situ measurement of the structural properties of existing road pavements constructed with unbound materials. Continuous measurements can be made down to a depth of approximately 850mm or when extension shafts are used to a recommended maximum depth of 2m. Where pavement layers have different strengths the boundaries can be identified and the thickness of the layers determined. Correlation's have been established in earlier work (Van Vuuren 1969, Kleyn and Van Heerden 1983, Smith and Pratt 1983) between measurements with the DCP and CBR (California Bearing Ratio) so that results can be interpreted and compared with CBR specifications for pavement design. A typical test takes only a few minutes and therefore the instrument provides a very efficient method of obtaining information that would normally require the digging of test-pits.

The design of the DCP is similar to that described by Kleyn, Maree and Savage (1982) in that it uses an 8kg weight dropping through a height of 575mm and a 60° cone having a diameter of 20mm. it is supplied with two 13-17 mm AF Spanners, Tommy Bar, 3mm AF Hex Wrench and a bottle of adhesive used for securing handle/top rod and bottom rod/cone joints.

The DCP apparatus consists of the following:-	
Guide Rod Handle	1pc
Sliding Hammer – 8kg	1pc
Guide Rod	1pc
Coupling Guide	1pc
Hand Guard Plate	1pc
Coupling Clamping Ring	1pc
Penetration Rod	1pc
Penetration Cone 60° x Ø 20mm	2pcs
Base Guiding Piece	1pc
Steel Ruler 1m (L)	1pc
Tools Kit Set	1pc
Steel Carrying Case	1pc

MACKINTOSH / JKR PROBE APPARATUS



This equipment is particularly useful for initial site investigation work in remote area. Use in conjunction with control boreholes considerable area can be investigated quickly and cost effectively. The set capable probing up to 13 meters depth depending on ground condition.

Model Number	SL102 Mackintosh Probe Apparatus	Model Number	SL103 JKR Probe Apparatus
Weight	27kg	Weight	28kg
13 nos.	Penetration Rod (1.2m each)	13 nos.	Penetration Rod (1.2m each)
13 nos.	Coupling	13 nos.	Coupling
2 nos.	Pipe Wrenches	2 nos.	Pipe Wrenches
2 nos.	Penetration Cone 30° (MAC)	2 nos.	Penetration Cone 60° (JKR)
2 nos.	Hammer Nut (MAC)	2 nos.	Hammer Nut (JKR)
1 no.	Hammer (MAC)	1 no.	Hammer (JKR)
1 no.	Lifting Handle	1 no.	Lifting Handle
1 no.	Heavy Duty Steel Carrying Case	1 no.	Heavy Duty Steel Carrying Case

*1 copy of Instruction Manual