

## **DYNAMIC CONE PENETROMETER**

### **BE 25**

The Dynamic Cone Penetrometer (DCP) is a portable tool for rapidly measuring the in-situ structural properties of unbound road pavement layers. It consists of an 8 kg weight dropping 575 mm onto a 20 mm diameter cone attached to a shaft, allowing penetration measurements up to approximately 850 mm deep. Readings are taken after a set number of blows, adjusted based on layer strength: 5–10 blows for strong granular bases, and 1–2 blows for weaker sub-base layers or sub grades. The test requires three operators—one to hold the device vertically, one to operate the hammer, and one to record results. It's quick, taking only a few minutes, and efficiently identifies layer boundaries and thicknesses without excavation.

### **STANDARD FOLLOWING**

ASTM D6951, IRC SP 72

### **DESCRIPTION**

BE 25-01	Cone	diameter: 20 mm $\pm$ 0.1 mm
BE 25-02	Cone angle	60°
BE 25-03	Hammer Weight	8 kg $\pm$ 0.1 kg
BE 25-04	Hammer freefall height	575 mm $\pm$ 1 mm
BE 25-05	Upper steel shaft	16 mm diameter
BE 25-06	Lower steel shaft	16 mm Diameter
BE 25-07	Graduation of lower shaft	Marked in 5 mm increment
BE 25-08	Length of lower shaft	900 - 1200 mm long
BE 25-09	Case size approximately	1100 x 250 x 150mm
BE 25-10	Weight	29kg

