

California Bearing Ratio

UMI - 106D

As per IS: 2720 (Part XXXI)

Introduction

DIGITAL CBR TEST APPARATUS

As per IS: 2720 (Part –XXXI, ASTM and BS

Introduction

California Bearing Ratio Test Apparatus, popularly called CBR method is used for finding the relative bearing ratio and expansion characteristics of soil used for base, sub-base and sub-grade of roads, pavements and run ways. Test can be conducted on all types of soils including sand, gravel, crushed stone etc. CBR test is extensively used for selection of materials and control of sub base.

The testing procedure is very simple. A 50 mm dia penetration piston is forced in the test soil and load required to penetrate the piston is measured. Load is measured by mean of compression proving ring and penetration depth by dial gauge.

General Apparatus

Standard CBR apparatus consist of the following:

1. Load Frame 5000 kg
2. CBR Mould with Perforate Base Plate & Collar
3. Penetration Piston
4. Circular Metal Spacer Disc
5. Annular Metal Weight
6. Slotted Metal Weight
7. Perforated Plate of gun metal
8. Rammer

Essential Accessories Included with equipment

- Digital Load Cell, range 5000 kg, LC 1 kg
- Digital Displacement Sensor, range 10x0.01 mm
- Power Cable for Indicator
- Digital Indicator for Load and Displacement



UMI-106D

Digital Displaying CBR Apparatus

This is essentially A standard motorized CBR Machine except that the unit is equipped with Displacement and Load Transducer to replace conventional Dial Gauge and Proving Ring. We can achieve as high as 0.1 kg least-count with Load Cell and 0.001 mm with displacement Transducer. The unit comes with RS232 port to transfer online data over available computer. The software for this application is provided with the machine. Machine can be operated on 220-240V, 50 Hz, single phase AC supply.

We also manufacture CBR software for data analysis where no manual calculation is done and all results and graphs etc. are available on click of computer mouse.