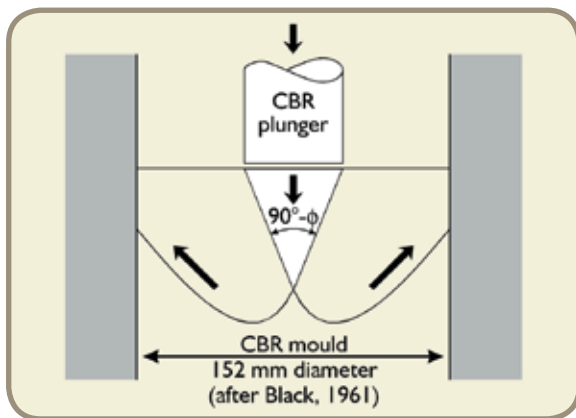


24 Soil Testing - Compaction and CBR

California Bearing Ratio

The California Bearing Ratio test, or CBR test as it is usually termed, is an empirical test first developed in California, USA, for estimating the bearing value of highway sub-bases and sub-grades. The test follows a standardised procedure and there is little difference between BS/EN and ASTM tests. However, there are numerous ways of preparing samples and in this respect American practice differs in detail from British practice.

This test can be performed in the laboratory on prepared samples or on location. It is important to appreciate that this test, being of an empirical nature, is valid only for the application for which it was developed, i.e. the design of highway base thicknesses.



EL24-9160 series CBR-Test 50 with accessories

A number of options are available to collect and analyse data with the ELE CBR-Test 50.

- 1 Mechanical, using standard Load Rings and Penetration Dial Gauges.
- 2 Electronic, Load Transducers and Displacement Transducers in conjunction with the ELE Electronic Control and Readout Unit supplied with download software.
- 3 Electronic, using Electronic measuring devices as above in conjunction with the ELE DataSystem that provides full analysis of CBR Test data.

CBR-Test 50 Machine

BS 1377, 1924; EN 13286-47; ASTM D1883; AASHTO T193

- ◆ Two speed machine (BS/EN and ASTM)
- ◆ Rapid platen adjustment
- ◆ Complete with stabilising bar
- ◆ Compact, bench-mounting design
- ◆ Options for mechanical or electronic measurement

Designed for performing laboratory CBR tests to BS 1377, EN13286-47 and ASTM D1883, this bench mounting machine comprises a twin column frame incorporating a motorised drive system. Two speeds are provided, 1.0 mm/min for BS/EN and 1.27 mm/min for ASTM tests. Rapid adjustment of the platen is provided, which enables daylight to be taken up quickly and also close control of application of a seating load.

Specification	
Dimensions l x w x h	550 x 400 x 1220 mm
Maximum vertical clearance	800 mm
Horizontal clearance	255 mm
Platen diameter	133 mm
Platen travel	105 mm
Weight	80 kg

Ordering Information

EL24-9150/01 CBR-Test 50. 50 kN load frame complete with stabilising bar. For 220 V AC, 50 Hz, 1ph

Electronic Control and Readout Unit see EL27-1200/09

Spares

EL24-9170 Stabilising Bar