

# CALIFORNIA BEARING RATIO

## BE01

This is a 50kN digital machine driven by a stepper motor, tailored for laboratory CBR (California Bearing Ratio) testing. Its microprocessor-based electronics ensure precise speed control and a user-friendly interface. It offers two fixed speeds: 1.2 mm/min for BS standards and 1.27 mm/min for ASTM standards, along with a fast platen adjustment speed of 50 mm/min.

In simpler terms, it's a specialized lab device for testing soil strength, using a motor to control movement accurately. The built-in computer chip makes it easy to operate and maintains consistent speeds for different testing standards, with a quick adjustment option for the testing platform.

## HIGHLIGHT

- 1) **Precise Speed Control:** Stepper motor ensures accurate speed regulation.
- 2) **Microprocessor-Driven:** Advanced microprocessor for reliable operation.
- 3) **Large LED Display:** 20mm LED for clear, easy-to-read output.
- 4) **Dual Speed CBR:** Supports BS and ASTM standards.
- 5) **Fast Platen Adjustment:** 50mm/min for quick setup.
- 6) **Optional Data Logger:** Automatic data collection available at additional cost.

## STANDARD FOLLOWING

IS: 9669, IS: 2720 (Part 16), EN 13286-47, ASTM D1883, AASHTO T193, BS 1377:4, 1924:2

## BE 01-01

### CALIFORNIA BEARING RATIO TEST APPARATUS, MOTORIZED, SINGLE SPEED

The equipment you're referring to has the same overall design and components as the BE 01-1 with the key difference being the material used for the mould assembly. Specifically, the mould, perforated base plate, and mould extension collar are made of Gun Metal instead of Mild Steel. The equipment operates at a one speed of 1.25 mm per minute.

### CBR MACHINE WITH ACCESSORIES



### THE APPARATUS INDEX:-

BE 01-01	<b>Load Frame</b> , 50 kN (5000kgf) Capacity, Single Speed 1.25 mm per minute.
BE 01-02	<b>Steel Mould</b> -150 mm ID x 175 mm high
BE 01-03	<b>Steel Perforated Base Plate</b> -for BE 12001 Mould
BE 01-04	<b>Steel Extension Collar</b> -150 mm ID x 50 mm high
BE 01-05	<b>Penetration Piston</b> , 50 mm face die
BE 01-06	<b>Adjustable Bracket</b> , for Penetration Dial Gauge
BE 01-07	<b>Circular Metal Spacer Disc</b> , with detachable handle, 148 mm dia x 47.7 mm high
BE 01-08	<b>Annular Metal Weight</b> , 2.5 kg, 147 mm die with 53 mm dia central hole
BE 01-09	<b>Slotted Metal Weight</b> , 2.5 kg, 147 mm dia, with 53 mm dia slot
BE 01-10	<b>Perforated Plate</b> , 148 mm dia, with adjustable stem and lock nut
BE 01-11	<b>Aluminum Tripod</b> , for Dial Gauge
BE 01-12	<b>Cutting Collar</b>
BE 01-13	<b>Rammer</b> , 2.6 kg, 310 mm controlled drop
BE 01-14	<b>Rammer</b> , 4.9 kg, 450 mm controlled drop
BE 01-15	<b>Proving Ring</b> , Capacity 50 kN
BE 01-16	<b>Dial Gauge</b> , 25 mm travel, 0.01 mm least count

## BE 01-02

### LABORATORY CALIFORNIA BEARING RATIO TEST APPARATUS, MOTORISED,3 SPEED:-

The equipment you're referring to is almost identical to the BE 01-01 model in terms of its overall structure and components. However, there are a few key differences in the 3 Speed and as your order Manual type.



**LABORATORY CALIFORNIA BEARING RATIO TEST APPARATUS, MOTORIZED, ELECTRONICS.**

The equipment you're referring to is almost identical to the BE 01-01 model in terms of its overall structure and components. However, there are a few key differences in the Single Speed/3 Speed and include Load cell, LVDT, Digital Display.



**CBR Test Electronic outfit for consists of:**

**BE 01-03-01**

**Channel Digital Indicators** 1 No. Mode of Digital: The decimal Display point is positioned by display the channel selector switch Power: 220V  $\pm$ 10% mains, 50 Hz, Single Phase, AC supply No. of channels: 2, Parameter: By a selector switch display

**BE 01-03-02 LOAD CELL - 1 No.**

Capacity: 50 kN (5000 kgf), Compression Type with 3m long cable  
Maximum: 110% of the rated capacity Overload  
Sensing: Strain Gauges in full bridge configuration

**BE 01-03-03 LVDT- 1 No.**

With sufficient long cable 1 No.  
Range:  $\pm$ 25 mm  
Sensing element: LVDT

**BE 01-04**

**LABORATORY CALIFORNIA BEARING RATIO TEST APPARATUS, MOTORIZED, ELECTRONICS WITH SOFTWARE**

The equipment you're referring to is almost identical to the BE 01-03 model in terms of its overall structure and components. However, there are a few key differences in the Single Speed/3 Speed.

**IMPORTANT EXTRAS**

**BE 01-04-20** Data Acquisition system

**BE 01-04-21** Software



**LABORATORY CALIFORNIA BEARING RATIO TEST APPARATUS SERVO TYPE ELECTRONICS WITH SOFTWARE**

The equipment you're referring to is almost identical to the BE 01-03 model in terms of its overall structure and components. However, there are a few key differences in the Single Speed/3 Speed and servo load type.

