# **VcB -** 250





# Optical Vickers Cum Brinell Hardness Testing Machine



Wide Testing Range from Soft metal to medium hardness Steel.



Motorized loading/unloading.



Built in Projection Screen to get accurate Result





#### Features:

- Major both Vickers & Brinell hardness of a metal in a one machine.
- Easy load selection with push knob
- Load range from 5 kg to 250kg
- Optical Magnifications at screen 35X, 70X
- A precision indentation measurement
- Load accuracy ± 1%
- Easy load-unload method.
- High accuracy and repeatability of measurement.
- Wide testing range from soft metal to hard

#### **Description:**

Vickers cum Brinell machine is compact hardness testing machine and has been designed for measuring both Brinell Hardness and Vickers Hardness of metal of all types.

These testers are suitable for measuring the hardness of precision metallic parts with wide testing range from soft to hard and their accurate results are obtained as be standard.

#### **Construction:**

FIE Make Hardness Testers of Vickers series are designed and manufactured for very high accuracy. Ease of operation, reliability and long-term stability. These machines are suitable for checking Vickers or Brinell Hardness of steel and other metals Loads are applied with dead weights and are selectable with a push button.

The measurement of Diagonal (for Vickers) & Diameter (For Brinell) of indentation is done with the help of built-in optical system with graduated readout with micrometer. After taking indentation on work-piece the objective lens is automatically swiveled in position. Indentation image appears on the focusing screen fitted in the front of the machine. Loading cycle is started with push button in the front where unloading is done manually by a hand lever.

#### **Technical Specifications :**

| Test Loads for Vickers Test | 5,10,15,20,30,40,50,60,100,120 kgf. |
|-----------------------------|-------------------------------------|
| Test Loads for Brinell Test | 15.625,31.25,62.5,187.5,250 kgf     |
| Optical Magnification       | 35X, 70 X                           |
| Max. Test Height (mm)       | 200                                 |
| Throat Depth (mm)           | 150                                 |
| Machine Dimension (mm)      | L780 x W361 x H 1100                |
| Weight (Approx.)            | 250 kg                              |
| Power Supply                | 220 VAC, 50 Hz, 1 Phase             |



#### Standard Accessories :

| Standard Test Block              | 1 No.       |
|----------------------------------|-------------|
| Vickers Diamond Indenter         | 1 No.       |
| 2.5 mm Ball Indentor             | 1 No.       |
| 5 mm Ball Indentor               | 1 No.       |
| HV Standard Test Block           | 1 No.       |
| Brinell Test Block 187.5/2.5 HBW | 1 No.       |
| Steel Ball Ø2.5 & Ø5.0 mm        | 5 Nos. each |
| 5X Objective                     | 1 No.       |
| 10 X Objective                   | 1 No.       |
| Spanners                         | 1 Set       |
| Electric Cord                    | 1 No.       |
| Halogen Lamp                     | 1 No.       |
| Telescopic Cover                 | 1 Set       |
| Instruction Manual               | 1 Book      |

Due to constant Research & Development, Specifications and Features are subject to change without notice.

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### Optical Vickers Cum Brinell Hardness Testing Machine Model: VcB-250