

## **VERTEX**

# COMPUTERISED BRINELL HARDNESS TESTER MODEL-B3000PC



Computerized Brinell Hardness Tester is a simple and a accurate means to produce automatically measures the ball Indentation give Brinell hardness number. These testers are suitable for measuring the hardness of metallic parts with wide lasting range - from soft to hard, and their accurate results are widely acclaimed. These testers strictly confirm to IS: 2281, BS: 10003-2 and ASTM E-10.

#### **FEATURES:**

- Fully Computerized (PC Based) Brinell Hardness Tester.
- Direct and accurate measurement of Brinell Hardness Number using "State of Art" image processing technology.
- 'Wide testing range': from soft metal such as lead up to medium hardened steels.
- High accuracy and repeatability of measurement at all loads.
- Faster measurement yielding to higher productivity.
- Hydraulic loading and unloading cycle.
- Advanced Window based software.

#### **LATEST GUI FEATURES:**

- User friendly software with all help file and Window Features.
- Online indentation setting and focusing on PC monitor.
- Advance image processing: Algorithms implemented for precise calculation of hardness numbers with various options to cover all ranges of specimen.

#### **BATCH FILE PROCESSING:**

• Option for data/storage and reports generation.

#### STATISTICAL EVALUATION:

- Software for calculating standard deviation, mode medium, histogram etc.
- Wide options in calibration mode.
- Extendibility for future advanced image processing analysis, requirements.

#### **CONSTRUCTION:**

The robust machine frame is designed to accommodate the high precision loading system and an optical device with CCD camera. Specimen is placed on a testing table. The test cycle is semi-automatic. The accurate load is applied on a ball indenter by means of a lever and weights. After a specific lapse of time, the load is removed. The image is digitized using a CCD camera fitted on the optical device and captured by the PC. The diameter if the indentation is directly measured by Pc togive the Brinell Hardness Number directly.

#### **TECHNICAL DATA:**

| Total Load                  | kgf     | 500 to 3000 in stages of 250 kgf |
|-----------------------------|---------|----------------------------------|
| Magnification of objectives | -       | 4x                               |
| Max. Test Height            | mm      | 380                              |
| Scale least count           | mm      | 0.01                             |
| Throat depth                | mm      | 200                              |
| Machine Dimension (Approx.) | mm      | L 745 x W 385 x H 1178           |
| Weight (Approx.)            | kg      | 450                              |
| Power Supply                | V/Cy/Ph | 415/50/3                         |
| Measurement Range           | mm      | 1-6                              |

### **STANDARD ACCESSORIES**

| 200 mm Dia Flat anvil  | 1 PC.   |
|--|---------|
| Testing table 70 mm dia with "V" groovefor round jobs 10 to 80 mm dia. | 1 PC.   |
| Ball holder 5 mm   | 1 PC.   |
| Ball Holder 10 mm  | 1 PC.   |
| Test Block HB-5/750  | 1 PC.   |
| Test Block HB-10/3000  | 1 PC.   |
| Allen Spanner  | 4 PCS.  |
| Telescopic Cover for elevating screw protection                        | 1 SET.  |
| Electric Cord  | 1 PC.   |
| Instruction manual   | 1 BOOK  |
| Spare balls 5 mm   | 10 PCS. |
| Spare Balls 10 mm  | 10 PCS. |





