



# Touch Screen Fully Automatic Computerized Brinell Hardness Testing Machine

# Touch Screen Fully Automatic Computerized Brinell Hardness Testing Machine, Model: B 3000-TSFA

#### Features:

- Fully Computerized Touch Screen Brinell Hardness Testing Machine.
- Accurate Measurement of Brinell Hardness number using "State of the art" image processing technology.
- Wide testing range: from soft metal up to hardest.
- High accuracy & repeatability of measurement at all loads.
- · Faster measurement yielding to higher productivity.
- Small size of indentation makes it a non destructive testing on finished components.
- Electrical loading & unloading cycle.
- Advanced windows based software
- Inbuilt branded touch screen laptop.
- · Front panel touch screen display.
- Single phase fully electrical machine with no hydraulics.
- · Fully automatic operating cycle.
- Safety guard for weights.

#### Latest GUI features

- User Friendly software with windows features.
- Online indentation setting & focusing on front touch screen display.
- 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 & reports generation.
- Statistical Evaluation: Software for calculating standard deviation, mean, median, histogram etc.
- Wide options in calibration mode calibration/verification on PC makes easier to operate.
- Extensibility for future advanced image processing analysis
  requirements.
- USB Printer port for printer interface with result & graph print out.
- Facility to measure in Manual, Semi automatic & Automatic Mode.
- Facility to export result/data in PDF format.
- Can take printout of the results through wi-fi network.

### Application:

'FIE' touch screen Brinell hardness tester Model B 3000 - TSFA is a simple and accurate means to produce and automatically measure the indentation to give Brinell hardness number.

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 widely acclaimed.

These testers strictly confirms to IS 1500-2, BS:10003-2 and ASTM E-10.

#### Construction:

The robust machine frame is designed to accommodate the high precision loading system and an optical device with CCD Camera equipped with front touch screen laptop.

The image is digitalized using CCD camera fitted on the optical device and is captured by the front touch screen laptop.

The diameters of the indentation are directly measured by software to give the Brinell hardness number.

The machine is equipped with latest touch screen branded laptop so their is no need to arrange separate computer.



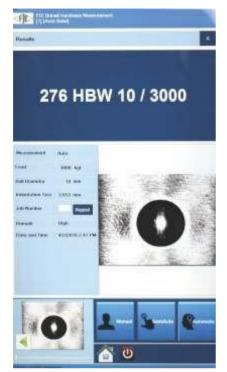
#### Technical Specifications:

Test Loads	250 to 3000 in stages of 250kgf.	
Magnification of objectives	4X	
Measuring Range	1 to 6mm	
Maximum Test Height (mm)	380	
Scale least count (mm)	0.01	
Throat Depth (mm)	200	
Machine Dimensions	L1025 x W650 x H1800 Approx.	
Weight	405 Kg. Approx.	
Power Supply	230V, 50Hz, Single Phase.	

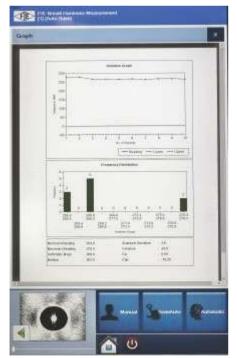
## Standard Accessories:

T 4: T - 1-1 - 0001: -	d NI.	
Testing Table 200mm dia	1 No.	
Testing Table 70mm dia with 'V groove		
for round jobs 10 to 80mm dia.	1 No.	
Ball Indentor 5mm	1 No.	
Ball Indentor 10mm	1 No.	
Steel Ball 5mm dia	5 Nos.	
Steel Ball 10mm dia	5 Nos.	
Test Block HB-5/750	1 No.	
Test Block HB-10/3000	1 No.	
Allen Spanner	4 Nos.	
Weights	1 Set	
Rexin Bellow for elevating screw protection	1 No.	
Software CD	1 No.	
Instruction Manual	1 Book.	

## Software Packages for - B 3000-TSFA



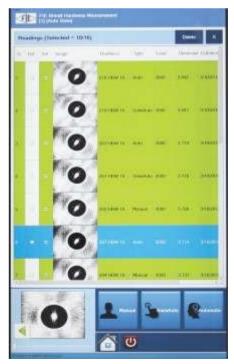
Result Window



Statistics



**Test Certificate** 



Readings with Impression Window

FIE reserves the right to change the specifications without notice due to constant improvement in design.

Manufactured By:



## Fuel Instruments & Engineers Pvt. Ltd.

#### Sales & Service By

Force-Tech Calibration System

(NABL Accredited Calibration Laboratory vide certificate No. CC-3610) KW-09,British Park Phase-2, Indore-453771