

Parvali II Yadrav

Over **60** years of consistent excellence

# Optical Vickers Hardness Testing Machine

Model : VM 50



THIG IFIEL (Fie Pvt. Ltd.) (1) - IResultSI

SELECTED INDENTATION

Wide Testing Range from Soft metal to medium hardness Steel.



Motorized loading/unloading.



Built in Projection Screen to get accurate Result





# **Optical Vickers Hardness Testing Machine** Model: VM 50

#### Features :

- Testing range is very wide, from soft metal such as lead, upto the hardest, like hard steel.
- Same hardness number is obtained on the same specimen, regardless of the load applied.
- The indication is tiny and allows testing of a precision finished part.
- Loading and unloading cycle is motorized.
- Thin sheet metal is perfectly tested because the load applied very small.
- Built-in projection screen to get accurate results.

# **Application :**

'FIE' Vickers Hardness Tester is a simple and accurate means to produce and measure the diamond indentation.

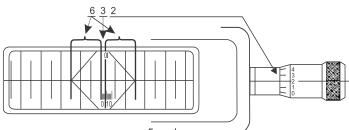
These testers are suitable for measuring the hardness of precision metallic parts with wide testing range - from soft to hard and their accurate results are widely acclaimed.

These testers strictly confirm to IS: 1501-2 and ISO 6507-2.

## **Technical Specifications :**

Test Loads	5,10,20,30,50 kgf.
Optional Test Load	1 kgf.
Optical Magnification	70 X
Optical Measuring Range (mm)	0.1 to 1.0
Max. Test Height (mm)	200
Scale least count (mm)	0.001
Throat Depth (mm)	135
Machine Dimension (mm)	L585 x W290 x H 860
Weight (Approx.)	70 kg
Power Supply	220 VAC, 50 Hz, 1 Phase

Number of special accessories are available on request and as per special requirement.



Example : Applied objective with 70-fold magnification Length of diagonal of indentation 632 micron = 0.632mm



For Auto Turret Machine after clicking on cycle start button indexing mechanism will operate automatically & loading mechanism starts, once loading finishes again indexing mechanism will positioned at measuring station.

#### **Construction**:

The robust machine frame is designed to accommodate the high precision loading system and an optical projection screen.

Specimen is placed on a testing table. The test cycle is fully automatic.

The accurate load is applied on a diamond indenter by means of a lever and weights. After a specific laps of time, the load is removed automatically. The objective is indexed with the test piece and the diamond indentation is projected on the measuring screen.

The diagonals of the indentation can be measured by means of the micrometer thimble of the projection screen.

### **Standard Accessories :**

Standard Test Block	1 No.
Diamond Indenter	1 No.
Weights	1 Set
FlatAnvil	1 No.
Vee-type anvil (Small & Big)	1 No. each
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.

Manufactured By :

Fuel Instruments & Engineers Pvt. Ltd. Sold And Serviced By : SUZUKI INSTRUMENTS Cell: 9594084085 E-Mail: sales@simaterialtestingservices.com Web : www.simaterialtestingservices.com