

VM 50-TS



Over **60** years of
consistent excellence



Computerized Touch Screen Vickers Hardness Testing Machine



Wide Testing Range from
Soft metal to medium hardness Steel



High accuracy & repeatability
of measurement at all loads



Front Panel Touch Screen Display



USB Connectivity



Features :

- Fully Computerized Touch Screen Vickers Hardness Testing Machine.
- Accurate Measurement of Vickers 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.
- Motorised loading and unloading cycle.
- Small loads allow testing of thin sheet metals.
- Advanced windows based software
- Inbuilt industrial PC with touch screen

Latest GUI features :

- User Friendly software with windows features.
- Online indentation setting & focussing 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 monitor makes easier to operate.
- USB Printer/Wi-fi printer port for printer interface with result & graph print-out.
- Facility to test in Manual, Semi-automatic & Automatic Mode.
- Facility to export result/data in PDF format.

Application :

'FIE' touch screen Vickers hardness tester is a simple and accurate means to produce and automatically measure the indentation to give Vickers 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 1501-2:2013

Construction :

The robust machine frame is designed to accommodate the high precision loading equipped with front touch screen laptop.

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

The accurate load is applied on a diamond indenter by means of lever and weights. After a specific lapse of time the load is released automatically.

The image is digitalized using USB camera fitted in the machine & is captured by the front touch screen laptop.

The diagonals of the indentation are automatically measured by software to give the Vickers hardness number.

The machine is equipped with industrial PC with touch screen so their is no need to arrange computer.



Technical Specifications :

Test Loads	5, 10, 20, 30, 50 kgf.
Maximum Test Height (mm)	200
Scale least count (mm)	0.001
Diagonal measuring range (mm)	0.05 to 0.3
Throat Depth (mm)	135
Machine Dimensions	L600 x W440 x H920 Approx.
Weight	100 Kg. Approx.
Power Supply	220VAC, 50Hz, 1-Ph.

Standard Accessories :

Standard Test Block	1 No.
Diamond Indenter	1 No.
Weights	1 Set
Flat Anvil	1 No.
Vee – type anvil (Small & Big)	1 No. Each
Spanners	1 Set
Software	1 No.
Telescopic Cover	1 Set
Instruction Manual	1 Soft Copy

Note : UPS - 600VA is must & not in our standard scope of supply.

Touch Screen Software Package includes :



Home Page



Impression Measurement



Data Entry



Statistics

			
FUEL INSTRUMENTS & ENGINEERS PVT. LTD.			
PLOT NO. 49 TO 50, PARVATI CO-OP. INDUSTRIAL ESTATE LTD., VADRAV - 424105, DIST. KOLHAPUR, MAHARASHTRA, INDIA.			
VICKER HARDNESS TEST CERTIFICATE			
Certificate No.	8105178	Certificate Date	31-01-2023
Supplier Name	Test Parameter		
Address	Load(kgf)	30 kgf	
	Load(High)	750 HV	
	Load(Low)	305 HV	
Sample Name	High Quantity	1	
Test Grade	Low Quantity	1	
	OE Quantity	1	
Test Parameter			
No.	Readings	Result	
1	750.4 HV/30	OK	
2	750.4 HV/30	OK	
3	750.4 HV/30	OK	
4	750.4 HV/30	OK	
5	750.4 HV/30	OK	
6	750.4 HV/30	OK	
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*Over **60** years of
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Manufactured By :

Fuel Instruments & Engineers Pvt. Ltd.

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