

Computerized Micro-Vickers Hardness Testing Machine: Model: MV1-PC

Features:

- Fully computerized (PC based) Micro hardness tester.
- Direct and accurate measurement of micro hardness number using 'state of art' image processing technology.
- Wide testing range from soft metal such as lead up to hardest, like hardened steel.
- High accuracy and repeatability of measurement at all loads.
- Small size of indentation makes it a non-destructive testing on finished components.
- Load selection by external knob.
- Motorized loading and unloading cycle.
- Small loads allow testing of thin sheet metals.
- Advanced windows based software includes:
 - Latest GUI features with user friendly software.
 - Online indentation setting & focusing on PC monitor.
 - Advanced image processing algorithms implemented for precise calculations of hardness numbers with various options to cover all ranges of specimen.
 - Batch file processing: Option for data / storage & reports generation for case depth analysis etc.
 - Statistical evaluation: Software for calculating standard deviation, mean, median, frequency distribution graph, variation graph etc.
 - Calibration mode facility.

Construction:

- The machine frame is designed to accommodate the high precision loading system.
- Specimen is clamped by vice or supported by proper fixtures. The test cycle is fully automatic.
- The accurate load is applied on a diamond indenter by means of dead weights.
- After lapse of time, the load is removed automatically.
- The image is digitalized using a CCD camera fitted on the machine and is captured by the PC.
- The diagonals of the indentation are measured by the PC and the Micro hardness number is displayed directly on monitor.



Technical Specifications:

Test Loads	10, 20, 50, 100, 200, 300, 500 gf.
Maximum test height	30mm with clamping vice 50mm without clamping vice
Scale least count	0.0001 mm
Sample Stage (XY stage) with micrometer heads of 0.01 mm Least Count.	10mm movement in each axis.
Clamping vice capacity	40mm Max.
Measuring Range	0.01 to 0.2 mm.

Standard Accessories:

Standard Test Block	1 No.
Diamond indenter	1 No.
Spanners	1 Set
Electric Cord & PC interface cord.	1 No. each
USB Device for Video	1 No.
Micro-Vickers software CD	1 No.
Instruction Manual	1 Book

* Optional Test Load: 1000 gf.

* PC & Printer is not in our standard scope of supply

Application:

Computerized Micro-Vickers hardness tester is a simple and accurate means to produce and automatically measured the diamond indentation to give micro hardness number directly as well as case depth. 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.

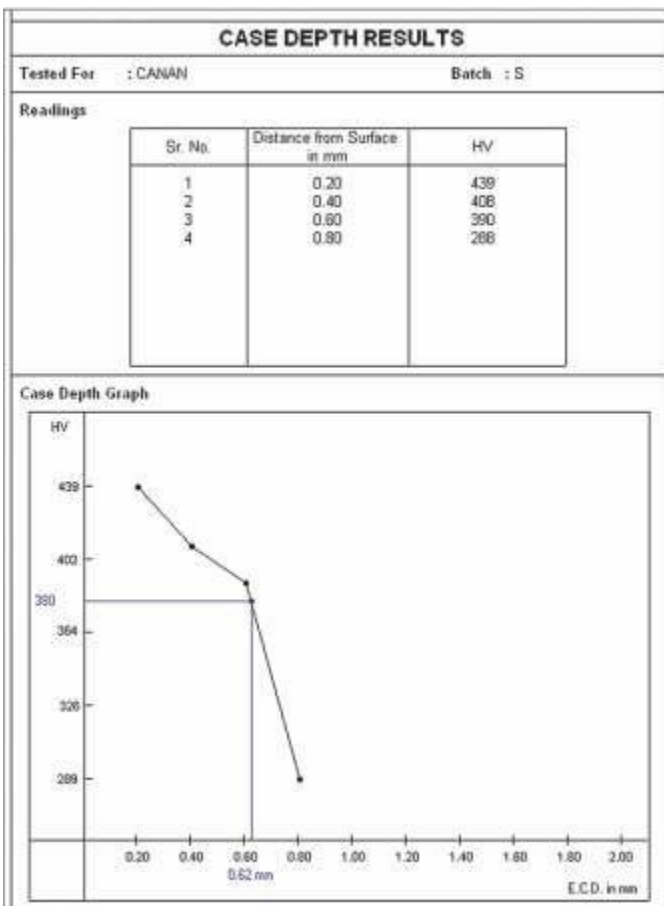
These testers are strictly confirms to IS: 1501(Part 2) 2013.



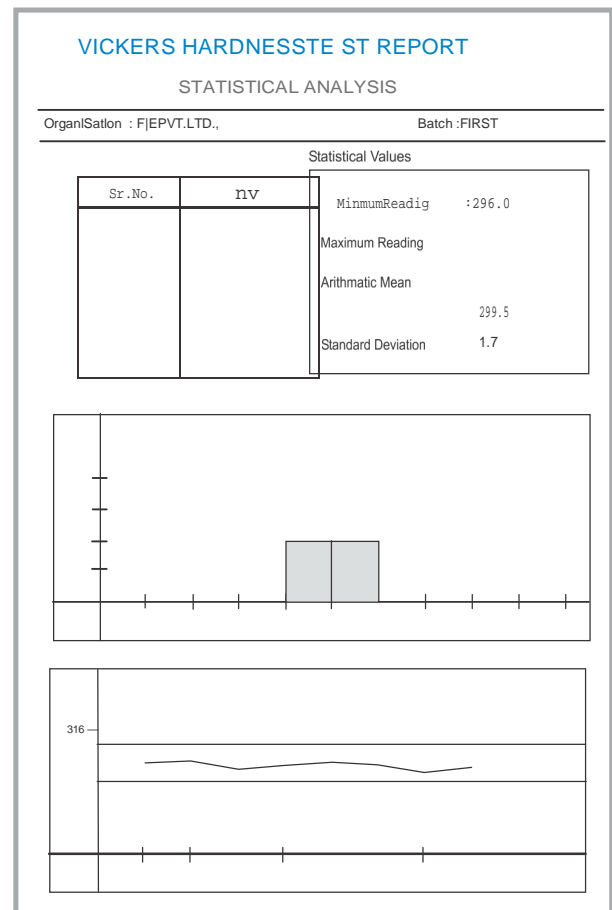
IndentationView



ResultView



Case depth results



Test Report