Motorized X-Y Stage
Computerized
Microvickers Hardness Testing Machine

Model: MV1-Pro

- Fully Computerized PC based Micro Hardness Tester
- High accuracy & repeatability of measurement at all loads
- Wide Testing Range from Soft metal up to hardest
- Motorized X-Y Stage
Features:

- Fully computerized (PC based) Micro hardness tester.
- Touch control XY movement.
- 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.
- Load range from 10 gf to 1000 gf.
- 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.
- Measure case depth hardness.
- 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 allied on a diamond indenter by means of dead weights. After lapse of time, the load is removed automatically.

The image is digitized using a CCD camera fitted on the machine and is captured by the PC.

The diagonals of the indentation are measured by the state of art image analysis software and the Micro hardness number is displayed directly on monitor.

Automated motorised XY platform used for measuring case depth in various conditions.

Application:

'FIE' Computerized Micro-Vickers hardness tester is a simple and accurate mean to produce and automatically measure 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 results are as per standard.

Due to constant Research & Development, Specifications and Features are subject to change without notice.