

MICRO-VICKERS HARDNESS SYSTEM CV-400DM™

Motorized turret, digital measuring microscope with external ccd monitor system

- "Easy measure" monitor system
- Motorized turret
- High quality digital microscope
- Fully automatic load control
- Easy to use operating system
- Two optical paths
- Built-in high speed thermal printer
- XY stage with minimum reading of 0.01mm
- Dual indenter (Vickers/Knoop) turret optional
- 2kg load optional

Typical applications

- Steels, nonferrous metals, IC wafers, small precision components
- Thin plastic, metallic foils, plating, coating, surface layers, laminated metals
- Effect of heat treatment, case depth analysis, depth of carburised and flame hardened layers



Technical specifications

Vickers scales	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1 (HV2)
Display	Dwell time (sec), hardness value, menu operated user interface, shows: hardness readings, general settings, diagonals, RS-232 connections, illumination settings. CCD camera on eyepiece projects indentation on standard accessory CRT screen, allowing easy to read and more accurate measurement
Test load	10 - 25 - 50 - 100 - 200 - 300 - 500 - 1000gf (2000gf optional)
Accuracy	Conforms to EN-ISO 6507 and ASTM E384
Load control	Automatic (loading/dwell/unloading)
Load duration	5 to 60 sec (5 sec increments)
Test force selection	By dial knob; applied load shows on display
Microscope	
Objectives	10x, 40x
Eyepiece magnification	15x / mechanical thumbwheel, digital encoder built-in
Total magnification	150x (observation), 600x (measurement)
Measuring range	200µm
Resolution	0.03µm
XY stage	
Dimensions	100mm x 100mm
Travel range	25mm x 25mm
Resolution	0.01mm (micrometers)
Specimen	
Maximum height	85mm (2.55")
Maximum depth	90mm (3.35") (from the centre)
Optical path	2-way switchable
Power supply	110-220V, 50Hz
Dimensions	470mm x 210mm x 420mm
Weight	36kg

Standard delivery

- Main unit with CCD Camera and monitor
- Motorized turret
- Diamond indenter Vickers
- Objectives 10x, 40x
- Eyepiece 15x
- XY-stage with micrometers
- Adjustable feet (3pcs)
- Clamping devices (3pcs)
- Extension tube for CCD-camera
- Digital eyepiece incl. protection cover
- Spirit level
- Micro-Vickers test plates (2pcs)
- Spare light bulb 12V-30W
- Spare fuses (2pcs)
- Installation and user manual
- CV Instruments certificate

Optional accessories

- 2kg test load / scales
- Knoop indenter
- Precision vice
- Certified indentors and test blocks

Optional system

- CV-CCD system for (semi-) and automatic traverses, pattern testing through pc support and motorised XY stage