



Hardness Testers - Measuring Quality

MICROPIXEL - D3



TECHNICAL DATA

TEST LOADS:

Vickers:

0.098 - 0.147 - 0.196 - 0.245 - 0.980 - 1.961 - 2.942 - 4.903 - 9.807 - 19.61 - 29.42 - 49.03 - 98.07 - 196.1 - 294.2 N (0.01 - 0.015 - 0.02 - 0.025 - 0.1 - 0.2 - 0.3 - 0.5 - 1 - 2 - 3 - 5 - 10 - 20 - 30 Kgf)

Knoop:

0.098 - 0.196 - 0.254 - 0.490 - 0.980 - 1.961 - 2.942 - 4.903 - 9.81 N (0.01 - 0.02 - 0.025 - 0.05 - 0.1 - 0.2 - 0.3 - 0.5 - 1 Kgf)

Brinell:

9.81 - 24.52 - 49.03 - 98.07 - 294.2 - 306.5 N (1 - 2.5 - 5 - 10 - 30 - 31.25 Kgf)

HARDNESS TESTS AVAILABLE:

Vickers:

HV0.01 - HV0.015 - HV0.02 - HV0.025 - HV 0.1 - HV 0.2 - HV 0.3 - HV 0.5 - HV 1 - HV 2 - HV 3 - HV 5 - HV 10 - HV 20 - HV 30

Knoop:

HK0.01 - HK0.02 - HK0.025 - HK0.05 - HK 0.1 - HK 0.2 - HK 0.3 - HK 0.5 - HK 1

Brinell:

HBW 1/1 - HBW 1/2.5 - HBW 1/5 - HBW 1/10 - HBW 1/30 - HBW 2.5/31.25

SCOPE OF APPLICATION:

To perform single and multiple micro and macro Vickers, Knoop and Brinell hardness tests on ferrous and non-ferrous metals such as: iron, steel, tempered steel, cast iron, brass, aluminium, copper and metal alloys. Heat treatments, hardened and nitrided materials. Tests on ceramics and glass.

REFERENCE STANDARDS:

ISO 6506, ISO 6507, ISO 4545, ASTM E10, ASTM E92, ASTM E384

POWER SUPPLY:

115/230VAC - 50÷60Hz

TEST CYCLE:

Manual focus, automatic hardness measurement (possibility of manual measurements available)

OPTICAL SYSTEMS:

- 5-position motorized turret with:
 - Optical lenses: No. 4 included - 5X, 10X, 20X and 50X as default setting
 - Indenters: No. 1 included - Vickers
- Energy-saving LED lighting to guarantee a natural-coloured vision
- High-definition 5 MP camera with 3.0 USB connection

IT SYSTEM:

Microsoft Windows 10®
Keyboard, mouse and 24" full HD monitor included

SOFTWARE:

- Vx®
- Manual XY table with mechanical vernier: 40x40mm stroke, 10µm pace
- Data output: USB, Ethernet
- Data export and backup as .pdf, .xls, .xml, .txt, and .csv files

OPTIONAL ACCESSORIES AND CUSTOMIZATIONS

- Further optical lenses to be installed: 2,5X (default setting replacement)
- Further indenters to be installed: Knoop; Ø1mm ball and Ø2.5mm ball (default setting replacement)
- Customizable test loads: up to 1gf; 5gf; 50kgf or 62,5kgf

DIMENSIONS

- Vertical capacity:
 - 130 mm using XY table
 - 180 mm without XY table
- Depth capacity: 162mm
- Z axis stroke: 40 mm
- Weight: 70Kg

