



Hardness Testers - Measuring Quality

XM 70 - D3



TECHNICAL DATA

TEST CYCLE:

Completely automatic hardness measurement

OPTICAL SYSTEMS:

- 6-position motorized turret with:
 - Optical lenses: No. 4 included - 2.5X, 5X, 10X and 40X 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
- Protection system for lenses and indenters, covered inside the measuring head
- Test surface automatic scan

IT SYSTEM

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

SOFTWARE:

- Vx Image®
- 100x60 mm XY motorized table
- Easily accessible pattern setup
- Autofocus (touch focus)
- Users management: different access levels to software setup
- Dynamic anti-collision system
- Image cleaning feature
- Data output: USB, Ethernet
- Data export and backup as .pdf, .xls, .xml, .txt, e .csv files

POWER SUPPLY:

115/230VAC - 50÷60Hz

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

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 - 490,3 N (0,01 - 0,015 - 0,02 - 0,025 - 0,1 - 0,2 - 0,3 - 0,5 - 1 - 2 - 3 - 5 - 10 - 20 - 30 - 50 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 - HV50

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

OPTIONAL ACCESSORIES AND CUSTOMIZATIONS

- Further optical lenses to be installed: 20X (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; or 62,5kgf

DIMENSIONS

Weight: 70kg

