

MODEL FH-10

Universal Hardness Testing Machine

Universal



HR



HV



HB



Model FH-10 Universal Hardness Tester with video indent measuring system

Features and benefits

- All hardness procedures according to global standards – Rockwell, Superficial Rockwell, Brinell, Vickers, and Knoop – also ball and indentation hardness testing for thermoplastics and the new Vickers depth (HVT) and Brinell depth (HBT) procedures.
- Superior range of testloads/force application ranging from 500g* to 250kg (1.1-551.2lbf).
- All procedures comply with EN/DIN/ISO, ASTM, and JIS.
- Industrial touchscreen, embedded high performance controller and two solid state HD drives.
- Automatic video indent measurement and magnification function.
- Bright LED illumination (ringlight optional).
- Connectivity: USB, RS232, UTP-R45-LAN, WLAN.
- Horizon advanced hardness testing software, includes file storage, test program storage, machine settings storage, etc.
- Includes workpiece clamping attachment.
- High precision spindle.



Model FH-10 firmware

MODEL DETAILS

- **FH-010-0000** 500gf-250kgf Universal Hardness Tester

Specifications

Universal

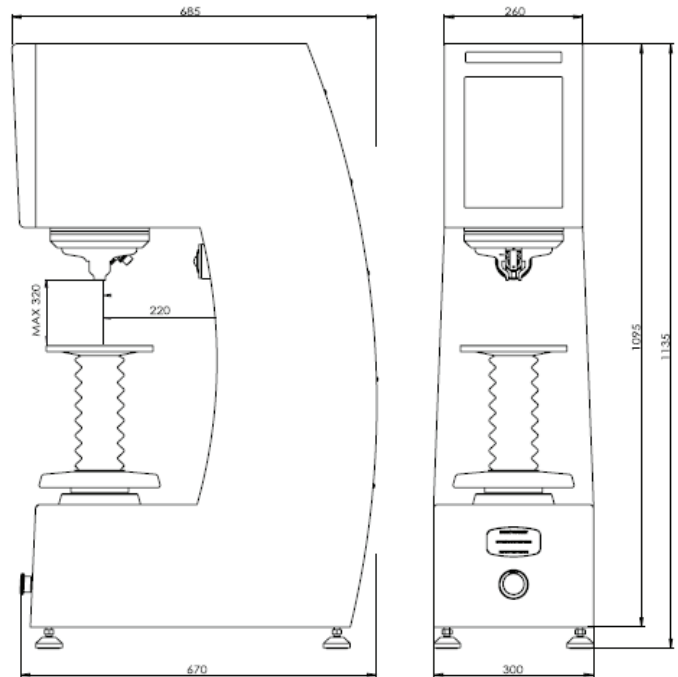
HR

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FH-10 SPECIFICATIONS

Hardness scales	Brinell, Vickers, Rockwell, Super-Rockwell, Knoop, Vickers depth (HVT), Brinell depth (HBT), Plastic
Optical	5 megapixel HD camera, indent zoom function
Display	High resolution industrial LCD touchscreen Optional: desktop LCD screen Optional: desktop LCD touch screen Optional: height adjustable LCD touchscreen
Controller	Embedded high performance system controller with data storage (optional)
Firmware	Horizon advanced hardness testing operating system including options for: manual measurement, automatic measurement, indent zoom function, scale conversion, file storage, report printing, test program storage, machine settings storage, graphic interface for swivel system position
Standards	Conforms with ISO 6506, 6507, 6508, 4545, ASTM E18, E92, E10, and JIS
Test load type	Load cell closed loop, force feedback system
Test cycle	Automatic and indent evaluation
Test loads	1 kgf/9.8 N/2.2lbf to 250 kgf/2.45 kN/551lbf
Brinell test range	HB1/1kgf, 2.5kgf, 5kgf, 10kgf, 30kgf HB2.5/6.25kgf, 15.625kgf, 31.25kgf, 62.5kgf, 187.5kgf HB5/25kgf, 62.5kgf, 125kgf, 250kgf HB10/100kgf, 250kgf
Vickers test procedures	HV (0.5*) 1, 2, 3, 5, 10, 20, 30, 50, 100 (*optional)
Rockwell test procedures	A, B, C, D, E, F, G, H, K, L, M, P, R, S, V, Bm, Fm, 15N, 30N, 45N, 15T, 30T, 45T, 15W, 30W, 45W, 15X, 30X, 45X, 15Y, 30Y, 45Y, 30 TM, HMR 5/25
Indenter types (optional)	Brinell Balls: 1, 2.5, 5mm (0.03937, 0.098425, 0.19685in) Vickers Diamond: 136° Rockwell Diamond Core: 120° Balls: 1/16in, 1/8in, 1/4in, 1/2in (1.5875, 3.175, 6.35, 12.7mm)
Load duration	0.1-255 seconds
Connectivity	USB-2(4), UTP RJ45, LAN, WLAN
Specimen accommodation	Maximum test height 320mm (12.59in), maximum throat 220mm (8.66in)
Operating temperature range	10-35°C (50-95°F)
Operating humidity range	10-90% non-condensing
Weight	178kg (392.4lb)
Power supply	110 to 240V AC, 50/60Hz, single phase



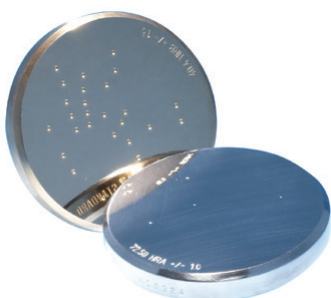
Model FH-10 – all measurements are in mm

STANDARD FEATURES

- 6.3x objective (95x magnification)
- 10x objective (150x magnification)
- Clamping protection nose
- Testing table ø80mm (3.15in)
- Power cable
- Installation and user manual
- Certificate

OPTIONAL ACCESSORIES

- Certified indenters
- Certified hardness test blocks
- optional objectives
- Testing table ø150mm (5.9in)
- Testing table ø235mm (9.25in)
- V-anvil ø180mm (7.1in)
- V-anvil ø120mm (4.72in)
- Other testing tables and XY-stages
- Precision vises, V-blocks and special clamps
- Software solutions for advanced application
- Precision vises for small parts
- Manual XY stage
- Motorised XY stage (250kg load capacity)
- 450 x 350mm large testing table with T slots



Test blocks



Available indenters