

MODEL FH-12

Universal Hardness Testing Machine

Universal



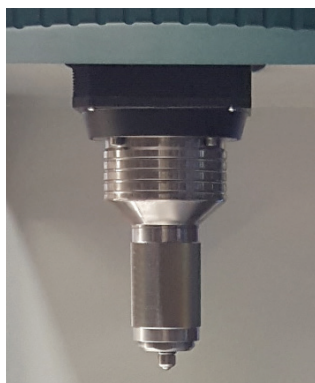
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Features and benefits

- Rockwell, Superficial Rockwell, Vickers, Knoop, Brinell, Ball indentation, HVT and HBT scales.
- Superior range of testloads/force application ranging from 500gf to 3000kgf (1.1-6614lbf), over three models.
- Motorized Z axis – standard.
- Descending test head with automatic workpiece detection.
- Free definable, manual or motorized six position turret for objectives and indentors at choice.
- High definition optical system for images of 0.7-1000x magnification.
- PC-based Horizon hardness testing firmware and database file system – standard.
- Large, adjustable 15in (381mm) industrial touchscreen (or mouse with normal 22in/558.8mm) LCD screen at choice).
- Automatic or manual focus, manual or fully automatic indent measurement – standard.
- Testing procedure and results storage on 500GB harddrive.
- LAN, WLAN, USB-2, RS232, printer and DVI connectivity – standard.
- On-board built-in driver for (optional) motorized X-Y stage – standard.
- Free definable test patterns case depth, traverse, free style, etc – optional.
- Large range of optional accessories.
- Raise and lower up to 600kg specimen – standard.
- 650 x 500mm T-slot table for exceptional support of test specimen.

MODEL DETAILS

- | | | |
|---------------------|------------|-----------------------------------|
| ● FH012-0000 | 1-250kgf | Universal Hardness |
| ● FH012-0001 | 3-750kgf | Universal Hardness |
| ● FH012-0002 | 10-3000kgf | Universal Hardness |
| ● FH012-0027 | 1-250kgf | Rockwell,
Superficial Rockwell |
| ● FH012-0029 | 10-3000kgf | Rockwell, Brinell |
| ● FH012-0034 | 3-750kgf | Brinell |
| ● FH012-0035 | 10-3000kgf | Brinell |

Specifications

Universal



HR



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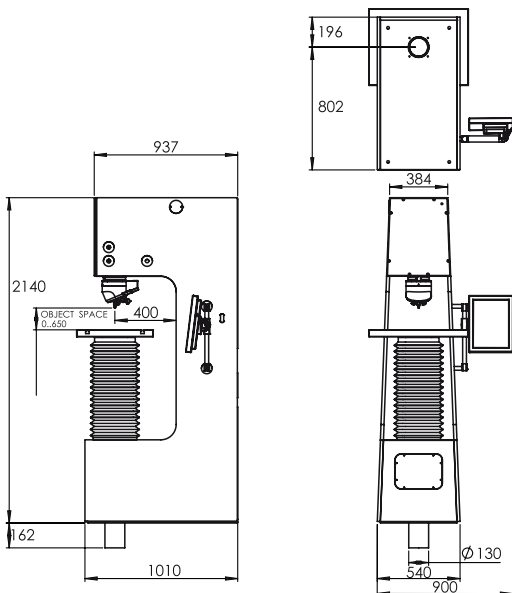
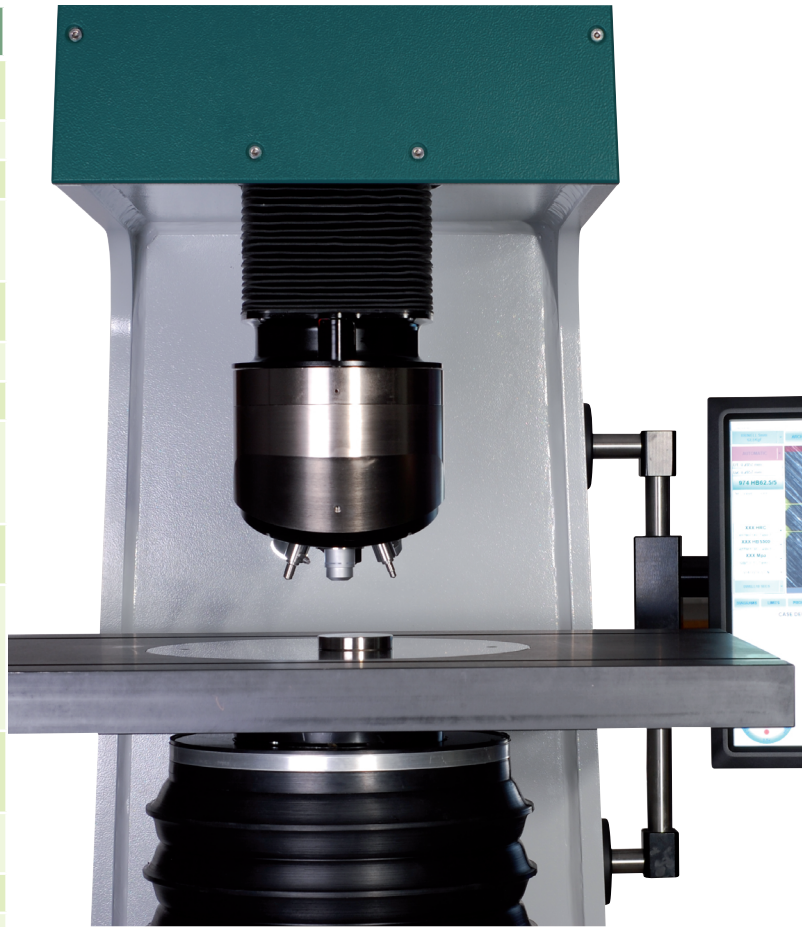


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FH-12 SPECIFICATIONS

Hardness scales	Rockwell, Superficial Rockwell Vickers, Brinell, HVT, HBT
Hardness resolution	0.01 Rockwell, 0.1 Vickers, 1 Brinell
Load application	Load cell, force feedback, closed loop system
Load range	1kgf/9.8N/2.2lbf to 250kgf/2.45kN/551lbf, 3kgf/29N/6.6lbf to 750kgf/7.35kN/1654lbf, 10kgf/98N/22lbf to 3000kgf/29kN/6614lbf
Motorized turret	Three indenter positions; three objectives positions
Optical system	High definition, 5Mp machine vision system
Objectives	Three installed for 0.7-1000x magnification
Electronic system	High performance built-in PC-based controller, Windows 7, 15in (381mm) full color touchscreen, automatic and manual measurement
Standards	Complies to all applicable EN/ISO and ASTM standards
Brinell test range	1kgf/9.8N/2.2lbf to 3000kgf/29kN/6,600lbf HB1: 1, 2.5, 5, 10, 30kgf HB2.5: 6.25, 15.62, 31.25, 62.5, 187kgf HB5: 25, 62.5, 125, 250kgf HB10: 100, 250, 500, 750, 1000, 1500, 3000kgf HBT: 5, 250kgf
Rockwell test scales	A, B, C, D, E, F, G, H, K, L, M, P, R, S, V, 15N, 30N, 45N, 15T, 30T, 45T, 15W, 30W, 45W, 15X, 30X, 45X, 15Y, 30Y, 45Y
Vickers test range	1kgf/9.8N/2.2lbf to 120kgf/1176N/265lbf (depending on model)
Test cycles	Automatic and manual
Force control	2-99 seconds
Connectivity	USB-2, Bluetooth, WLAN, LAN
Specimen accommodation	Vertical capacity maximum height: 650mm (25.5in), horizontal capacity maximum throat: 400mm (15.7in)
Power supply	100 to 240VAC, 50-60Hz single phase
Operating temperature range	5-40°C (41-104°F)
Operating humidity range	10-90% non-condensing
Weight	1100kg (2425lb)



FH-12 – all measurements are in mm

SUPPLIED AS STANDARD

- Motorized turret with six positions (Universal models)
- T-slot testing table 650 x 500mm
- Objectives for 0.7-1000x magnification (Universal models)
- Single indenter position (models FH...27, 29, 34, 35)
- 5MPx palm scanner (Brinell only models)
- Built-in three-axis support driver
- Toolset
- Large testing table
- Certificate
- Operation manual

OPTIONAL ACCESSORIES

- Testing table ø235mm (9.25in)
- V-anvil ø80mm (3.15in) for 3.3-20mm
- V-Anvil ø80mm (3.15in) for 12-80mm
- V-Anvil ø120mm (4.72in) for 20-140mm
- Manual XY-stages
- Certified indenters
- Certified hardness test blocks
- Testing table ø150mm (5.9in)