

# MODEL FH-1

## Rockwell and Universal Hardness Testing Machine



Model FH-1-4 Rockwell/  
Superficial Rockwell  
hardness tester

### Features and benefits

- Load cell, force feedback, closed loop system.
- Unparalleled rigidity.
- Unmatched gauge repeatability and reproducibility.
- Complies with all applicable EN/ISO, ASTM, and JIS standards.
- Shape correction settings for curved surfaces.
- Optical depth measuring system (Rockwell, HBT, HVT, ball indentation for plastic ISO 2039/1).
- 6.5in industrial full color touchscreen display; user-friendly interface, easy to operate.
- Go/No Go function with visual and acoustic warning.
- Large memory for measurements with statistic results.
- Easy calibration function.
- Testing program storage.
- Standard nose cone clamping attachment.
- Nine-pin serial and USB-2 outputs.
- External Brinell palm scanner II with LED backlight option.
- Large workpiece accommodation(300mm).
- Motorized spindle (optional).

### MODEL DETAILS

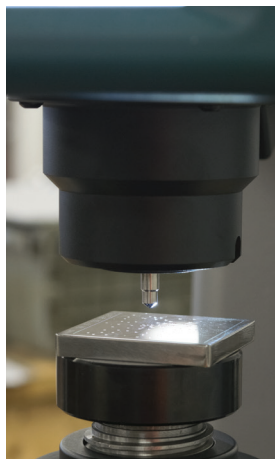
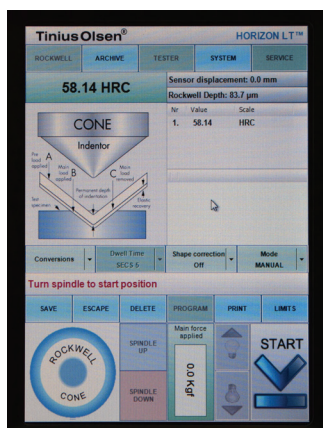
- **FH-001-0004** 3-150kgf Rockwell Superficial Rockwell HVT, HBT, ISO 2039/1

### STANDARD ACCESSORIES

- Fuse 3A slow (2 pcs)
- Power cable
- Certificate
- Installation and user manual
- Wireless mouse & keyboard

### BRINELL OPTIONS

- **FH-053-0004** Brinell Opt: Inc: Scanner, 5/10 mm Brinell scales DIA 1.6-6 mm Fit: 1 series
- **FH-053-0005** Brinell Opt: Inc: Scanner, 1/2.5 mm Brinell scales DIA 0.5-1.5 mm Fit: 1 series
- **FH-053-0006** Motorized Spindle, "Z" axis



# Specifications



## FH-1 SPECIFICATIONS

Load application	Load cell, force feedback, closed loop system
Hardness scales FH-1-4	Rockwell/Superficial Rockwell, HVT, HBT, ball indentation for plastic ISO 2039/1
Hardness scales FH-1-4 with brinell option	Rockwell/Superficial Rockwell, Brinell, HVT, HBT, ball indentation for plastic ISO 2039/1
Load range FH-1	3-150kgf (6.6-330lbf)
Test loads (kgf)	3, 15, 30, 45, 60, 100, 150
Brinell option test range	HB1/2.5, 5, 10, 31.25kgf (5.5, 11, 22, 69lbf) HB2.5/6.25, 15.625, 31.25, 62.5, 187.5kgf (14, 34, 69, 138, 413lbf) HB5/25, 62.5, 125kgf (55, 138, 276lbf) HB10/100kgf (220lbf), 10/250kgf HBT2.5/62.5, 187.5kgf (138, 413lbf)
Rockwell scales	A, B, C, D, E, F, G, H, K, L, M, P, R, S, V
Rockwell superficial scales	15N, 30N, 45N, 15T, 30T, 45T, 15W, 30W, 45W, 15X, 30X, 45X, 15Y, 30Y, 45Y
Plastic ball indentation	Meets or exceeds the requirements of ISO 2039/1
Scale resolution (depth)	0.1 micron
Display	6.5in full color industrial touch screen, testing results, statistics, can also be operated by mouse and keyboard
Standards	Complies with, or exceeds, EN/ISO, ASTM, and JIS standards
Test cycles	Fully automatic, Load, Dwell, Unload
Dwell time	1-99 seconds
Data output	USB-2 (RS232), RJ45 ethernet
Specimen accommodation	Height 300mm (11.81in) Throat 200mm (7.87in)
Operating temperature range	10-35°C (50-95°F)
Operating humidity range	10-90% non-condensing
Weight	96kg (211lb)
Power	100V to 240VAC, 50/60Hz, single phase



## CONNECTIVITY

FH-500-0011	FH-Series Connection w/ External Horizon (add. requirements per FH-model)
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## CABINET/TABLE

FH-095-1008	Cabinet/table for bench machines 710 x 750 x 800 mm. (Grey/Black top)
FH-009-1009	Cabinet/table for bench machines 1500 x 750 x 800 mm. (Grey/Black top)

## STAGE/ANVIL

FH-050-0036	Manual X-Y Stage w/ Analogue micrometers, 180x160mm 300 Kg Cap
FH-050-0266	60mm Flat Anvil
FH-050-0117	Testing table flat 80mm (all models)
FH-050-0041	Pedestal spot anvil 5mm
FH-050-0037	10mm Spot Anvil
FH-050-0040	V-anvil dia.40mm for 6-200mm
FH-050-0326	V-anvil ø63mm 10-100mm
FH-050-0025	80mm V-anvil for 3.3-20mm
FH-050-0026	80mm V-anvil for 12-80mm
FH-050-0027	80mm V-anvil for 20-140mm
FH-050-0235	Anvil ball Type Specimen Dia 6-25.4mm
FH-050-0324	Cylindrical V anvil 6-80mm
FH-050-0325	Cylindrical V anvil 50-200mm
FH-050-0029	Test Table 100x100mm, V-Groove 20mm wide, 10mm deep
FH-001-0006	Testing Table Flat 180mm for FH-1/2 Series
FH-002-0034	Testing table flat 235 MM, Screwfix
FH-050-0079	Large flat surface testing table 350x250mm; 2 T-slots
FH-050-0030	450x350mm Flat Test Table w/ 2 T-slots
FH-050-0198	Test table mounts (required for large tables)

## INDENTERS

FH-300-0001	Rockwell Diamond; HRC, HRA, &HRD Scales - ASTM
FH-300-0002	Rockwell Diamond; HR15N, HR30N, HR45N Scales - ASTM
FH-300-0003	Rockwell Diamond; HRC, HRA, HRD, HR15N, HR30N, &HR45N - ASTM
FH-300-0004	Rockwell Diamond (17mm); HRC, HRA, HRD, HR15N, HR30N, &HR45N - ISO
FH-300-0005	Rockwell Diamond(17mm); HRC, HRA, HRD, HR15N, HR30N, & HR45N - ISO & ASTM Cert
FH-300-0020	1/16 Rockwell Carbide Ball Penetrator - ASTM
FH-300-0021	1/16 Rockwell Carbide Ball Penetrator - ISO
FH-300-0022	1/16 Rockwell Carbide Ball Penetrator - ISO & ASTM Cert
FH-300-0023	1/8 Rockwell Carbide Ball Penetrator - ASTM
FH-300-0024	1/8 Rockwell Carbide Ball Penetrator - ISO
FH-300-0025	1/8 Rockwell Carbide Ball Penetrator - ISO & ASTM Cert
FH-200-0039	Rockwell indenter 1/4" Carbide ball, shaft dia 6.35 L 29mm; ISO 17025 Accredited
FH-200-0040	Rockwell indenter 1/2" Carbide ball, shaft dia 6.35 L 29mm; ISO 17025 Accredited
FH-200-0041	Rockwell spare carbide ball 1/16". ISO 17025 Accredited
FH-200-0042	Rockwell spare carbide ball 1/8" . ISO 17025 Accredited
FH-200-0043	Rockwell spare carbide ball 1/4" . ISO 17025 Accredited
FH-200-0044	Rockwell spare carbide ball 1/2" . ISO 17025 Accredited