

The first name in materials testing

# FH 30-5

### Rockwell and Brinell Hardness Testing Machine



The model FH 30-5 is an automatic, load cell, closed loop, force feedback, test force application system with Rockwell, Superficial Rockwell & Brinell scales as part of Hardness testing capabilities.





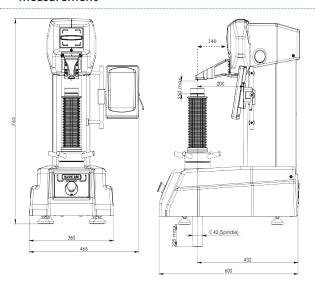
### Model FH 30-5

The model FH 30-5 is a new generation of hardness testing instrument with protruding nose design. This long nose design allows you to reach as far as 150mm inside a bore or just on flat material similar to any other Rockwell hardness tester.

A twin scale Rockwell machine that also provides Brinell testing. Easy to use, excellent workpiece overview. Test forces range from 1-187.5kgf, which means that even this basic model is equipped with Rockwell, Superficial Rockwell and Brinell load settings. System control is managed via a simple-to-use 6.5in full color industrial touchscreen. The touchscreen will also display results and statistics.

#### Features and benefits

- Load cell, closed loop, force feedback system
- 150mm protruding nose, 200mm throat depth
- Load range 1-187.5kgf (9.8-1839N)
- Meets or exceeds ISO, ASTM and JIS standards
- Force(load) measurement at the indenter position
- Absolute linear applied test force, no lever construction
- Hysteresis free mechanical system
- 250mm workpiece height
- Power LED light near indenter for bright sample illumination
- Removable workpiece clamp, with interchangeable inserts, clamps/holds sample firmly in position (optional)
- Industrial 6.5" touch screen
- USB connectivity
- ABS cover included, protecting machine base against falling objects
- Optional Brinell microscope package, for Brinell measurement





#### MODEL DETAILS

FH-030-0005

3-150kgf

Rockwell, Superficial Rockwell

1-187.5kg

Brinell (optional)

#### STANDARD ACCESSORIES

- Power cable
- Four adjustable feet
- Certificate
- Installation and user manual

## Specifications

FH 30-5 specifications	
Item #	FH-030-0005
Hardness scales	Rockwell, Superficial Rockwell and Brinell
Load application	Load cell, force feedback, closed loop system
Rockwell pre and main load	10kgf and 60kgf, 100kgf, 150kgf
Superficial Rockwell pre and main load	3kgf and 15kgf, 30kgf, 45kgf
Rockwell test scales available	A, B, C, D, E, F, G, H, K, L, M, P
Superficial Rockwell scales available	15N, 30N, 45N, 15T, 30T, 45T, 15W, 30W, 45W, 15X, 30X, 45X
Brinell test load	1-187.5kgf
Brinell test scales	HBW1/1, 1/1.25, 1/2.5, 1/5, 1/10, 1/30 HBW2.5/6.25, 2.5/7.8125, 2.5/15.625, 2.5/31.25, 2.5/62.5, 2.5/187.5 HBW5/25, 5/31.25, 5/62.5, 5/125
Plastic (ISO 2039-1/2)	49N, 132N, 358N, 961N





## Specifications

ASTM D785 parts A/B	For plastics and electric insulation materials
ISO 24343-1	For resilient materials and laminate floor
130 2 13 13 1	coverings
HVD (HVT)	HV5, 10, 20, 25, 30, 40, 50, 60, 100, 120, 125, 150
HBD (HBT)	HB1/5, 1/10, 1/30 HB2.5/6.25, 2.5/7.8125, 2.5/15.625, 2.5/31.25, 2.5/62.5, 2.5/125 HB5/25, 5/31.25, 5/62.5, 5/125
Carbon	HR2.5/7, 5/7, 5/15, 5/20, 5/40, 5/60, 5/100, 5/150
Display	6.5" full color industrial touchscreen, testing results, statistics, can also be operated by mouse and keyboard
Standards	Meets or exceeds ISO, ASTM, JIS standards
Test cycles	Motorized, automatic, pre-load, load, dwell, unload process
Indenters (optional)	Rockwell diamond cone: 120° Rockwell balls: 1/16in, 1/8in, 1/4in, 1/2in Brinell balls: 1mm, 2.5mm, 5mm
Dwell time (user defined)	Pre-load 1-99 seconds, Main load 1-99 seconds, Recovery 1-99 seconds
Connectivity	USB-2
Workpiece accommodation	Vertical capacity 250mm Horizontal capacity 200mm (from indenter center-line)
Machine dimensions	360 x 600 x 765 mm (WxDxH)
Weight	120kg (265lb)
Test force tolerance	<0.5%
Operating temperature range	10-35°C (50-95°F) non-condensing
Power supply	100-240V AC, 50Hz/60Hz, single phase
Humidity	10-90%, non-condensing
$^*\mbox{Calibration}$ of scales is required prior to use. Please specify desired scales at the time of ordering	

#### OPTIONAL ACCESSORIES

Stages/Anvils		
FH-050-0266	60mm flat anvil	
FH-050-0117	Testing table flat 80mm	
FH-050-0041	Pedestal spot anvil 5mm	
FH-050-0037	10mm spot anvil	
FH-050-0040	V-Anvil Ø40mm for 6-60mm	
FH-050-0326	V-Anvil Ø63mm for 10-100mm	
FH-050-0025	V-Anvil Ø80mm for 3.3-20mm	
FH-050-0026	V-Anvil Ø80mm for 12-80mm	
FH-050-0027	V-Anvil Ø80mm for 20-140mm	
FH-050-0235	Anvil ball type specimen Ø6-25.4mm	
FH-050-0324	Cylindrical V-Anvil 6-80mm	
FH-050-0325	Cylindrical V-Anvil 50-200mm	
FH-050-0029	Test table 100x100mm, V-Grove 20mm wide, 10mm deep	
FH-001-0006	Testing table flat 180mm	
FH-002-0034	Testing table flat 235mm, screwfix	

FH-053-0001	Brinell upgrade to Rockwell machine: Brinell scales: ****analog microscope 40x	
FH-050-0346	Clamping nose base	
FH-050-0347	Clamp nose attachment - flat (set of 2)	
FH-050-0348	Clamp nose attachment - V-25-38 (set)	
FH-050-0349	Clamp nose attachment - V-38-70 (set)	
FH-050-0350	Clamp nose attachment - concave-R-30 (set)	
FH-050-0351	Clamp nose attachment - convex-R-30 (set)	
FH-050-0352	Clamp nose attachment - V-70-150 (set)	
	Indenters	
FH-200-1002	Rockwell C Diamond Indenter. Ø3mm. certified ISO 6508/2 & ASTM-E18 A3	
FH-200-1004	Rockwell Indenter 1/16". Includes 1 carbide ball. Ø3mm ISO 6508/2 & ASTM-E18 A3	
FH-200-1005	Rockwell Indenter 1/8". Includes 1 carbide ball. Ø3mm. ISO 6508/2 & ASTM-E18 A3	
FH-200-1006	Rockwell Indenter 1/4". Includes 1 carbide ball. Ø3mm. ISO 6508/2 & ASTM-E18 A3	
FH-200-1007	Rockwell Indenter 1/2". Includes 1 carbide ball. Ø3mm ISO 6508/2 & ASTM-E18 A3	
FH-200-1008	Brinell Indenter 1mm. Includes 1 carbide ball. Ø3mm ISO 6506/2 & ASTM-E10 A3	
FH-200-1009	Brinell Indenter 2.5mm. Includes 1 carbide ball. Ø3mm ISO 6506/2 & ASTM-E10 A3	
	Tables/Cabinets	
FH-095-1008	Cabinet/table for bench machines 710 x 750 x 800 mm (grey/black top)	
FH-095-1009	Cabinet/table for bench machines 1500 x 750 x 800 mm (grey/black top)	
Calibration options		
FH-051-0000	Direct calibration; ISO 17025-A2LA compliant/per scale (factory)	
FH-051-0002	Additional scales calibration	
FH-051-0006	BRINELL direct and indirect verification/calibration & certification in compliance with ISO & ASTM, NADCAP. Includes direct force and indirect verification report (block readings), GR & R report	
FH-051-0008	ROCKWELL direct and indirect verification/calibration & certification in compliance with ISO & ASTM, NADCAP. Includes direct force and indirect verification report (block readings), GR & R report	





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