KEY FEATURES

The FH-30 series are a new generation of hardness testing instruments whose main body is a precision cast rigid structure, and which incorporates a load cell, closed loop force actuator to provide continuous force feedback information.

The load application system avoids “overshoot” during the test and guarantees one of the best GR & R results ever seen on Rockwell/Brinell hardness testers in this class. The tester meets or exceeds the ISO, ASTM and JIS standards. (ISO 6508, ISO 2039/1, ASTM E18, ASTM B254, JIS Z2245)

Test forces range from 2.5kgf to 187.5kgf 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 full color OLED display which will also display results and statistics.

- Load cell based force feedback, closed loop system
- Excellent accuracy
- Load range 2.5kgf/24.5N up to 187.5kgf/1838N (depending on model)
- Fully automatic operation
- Meets or exceeds ISO, ASTM and JIS standards
- Shape correction settings for curved surfaces
- Go/No Go function with visual and acoustic warning
- Easy calibration function
- Testing program storage
- Standard workpiece clamping attachment
- USB-2 connectivity
- External Brinell microscope (FH-30-1)
- Large workpiece accommodation
Technical Specifications

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<th>Rockwell and Superficial Rockwell all scales</th>
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Load application
Load cell, force feedback, closed loop system

Rockwell Pre load
3kgf and 10kgf

Rockwell Main load
15kgf, 30kgf, 45kgf, 60kgf, 100kgf, 150kgf

Rockwell test scales available

Superficial Rockwell scales available
15N, 30N, 45N, 15T, 30T, 45T
15W, 30W, 45W, 15X, 30X, 45X
15Y, 30Y, 45Y

Brinell test load (model FH-30-1)
2.5kgf/24.5N to 187.5kgf/1838N

Brinell test scales (model FH-30-1) available
HB1: 2.5kgf/24.5N, 5kgf/49N, 10kgf/98N, 20kgf/295N
HB 2.5: 6.25kgf/61.29N, 12.5kgf/122.5N, 25kgf/245.16N, 50kgf/500N, 100kgf/1000N, 200kgf/2000N, 300kgf/3000N
HB5: 25kgf/245.16N, 62.5kgf/612N, 125kgf/1225N
HB10: 100kgf/980.7N

Display
Full color multi-function OLED display

Display overview
Conversion to other hardness scales such as Brinell, Vickers, Leeb, UTM. Convex, concave adjustment, machine settings, calibration

Standards
Meets or exceeds, ISO, ASTM, JIS standards

Test cycles
Motorized, fully automatic, Pre load, Load, Dwell, Unload process

Indentors (optional)
Rockwell Diamond Cone: 120°
Rockwell balls:
Brinell Balls:
1mm, 2.5mm, 5mm, 10mm

Dwell time
Pre-load: 1-99 seconds,
Main load: 1-99 seconds,
Recovery: 1-99 seconds

Connectivity
USB-2

Optical system FH-30-1
Brinell microscope

Workpiece accommodation
Vertical capacity: 250mm
Horizontal capacity: 175mm (from indentor center-line)

Machine dimensions
250mm x 505mm x 745mm (WxDxH)

Operating Temperature Range
10° to 35°C (50° to 95°F) non condensing

Weight
82 kg (181 lb)

Power supply
100V AC to 240V AC, 50Hz/60Hz, single phase

*Note - Calibration of scales is required prior to use. Please specify desired scales at the time of ordering.

STANDARD ACCESSORIES
- V-anvil
- Flat anvil 60mm
- Round testing table 150mm
- Brinell microscope (FH-30-1)
- Power cable
- Four adjustable feet
- Certificate
- Installation and user manual

OPTIONAL ACCESSORIES
- Certified indentors (UKAS, DKD, ASTM)
- Rockwell C Indentor
- Rockwell B Indentor
- Brinell ball indentors 1mm, 2.5mm, 5mm, 10mm (FH-30-1)
- Certified reference hardness blocks (UKAS, DKD, ASTM)
- Custom testing tables
- Precision vice for small parts, jaw width 36mm
- Precision vice for small parts, jaw width 42mm
- Precision vice for small parts, jaw width 75mm
- V-blocks and special clamps
- Manual X-Y stage 100mm x 60mm, micrometer travel 25mm x 25mm
- Solid tester table and storage cabinet

Fig. 2. Solid tester tables with storage cabinets available
Fig. 3. Wide range of certified test blocks available
Fig. 4. Brinell microscope available for use with model FH30-1