Fig. 1. Model FH-30-0

**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

**Fig. 1. Model FH-30-0**
### Technical Specifications

#### Hardness scales FH-30-0
- Rockwell and Superficial Rockwell all scales *see note below

#### Hardness scales FH-30-1
- Rockwell, Superficial Rockwell and Brinell scales (2.5kgf/24.5N to 187.5kgf/1838N) *see note below

**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**

**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, 30kgf/295N
- HB 2.5: 6.25kgf/61.29N, 15.625kgf/153.2N, 31.25kgf/306.45N, 62.5kgf/612N, 187.5kgf/1838N
- 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: 1/16", 1/8", 1/4", 1/2"  
- 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

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**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

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

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**CONTACT YOUR LOCAL REPRESENTATIVE:**

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