ROCKWELL/BRINELL HARDNESS TESTER

HSM51



Features

- Apparatus for testing hardness of materials
- Simple and easy to operate
- Rockwell and Brinell testing capabilities
- Rockwell scales ‘B’ and ‘C’
- Brinell scale
- Test loads of 60, 100 and 150Kgf with preload of 10Kgf for Rockwell
- Test load of 187.5Kgf for Brinell testing with preload of 10Kgf
- Test tables in Ø38 (with integral ‘V’ notch) and Ø50mm
- Indenters supplied
- Dial gauge readout with ‘B’ and ‘C’ scaling
- Automatic selection of loading weights

Description

This combined hardness tester is designed for measuring hardness of metals. The specimens can be flat, or round and irregular in shape. The hardness tester is a cast iron bench mounted unit. The principle of operation is based around a lever and weights. The weights are applied to the free end of a lever, which then transmits pressure onto the plunger, which then indents the specimen under test. The weights are automatically selected using the rotary selector on the side of the unit. A dial gauge monitors the loading during preload and test loading. The large dial face has the Rockwell ‘B’ and ‘C’ scales visible along with the preload scale. A side mounted lever allows the safe and control application of the preload and main load. The specimen height is adjusted using the large elevation screw support and handle supplied. The elevation screw is protected with a rubber bellows. Two test tables are supplied in Ø50mm and Ø38mm, with the Ø38mm table incorporating a ‘V’ groove for holding round jobs from 6…45mm. A range of indenters are also supplied. Test blocks are supplied to Rockwell ‘C’ and ‘B’ scale and Brinell Hardness. Work piece clamps are provided for clamping the specimens down on the apparatus. A Brinell Microscope is supplied along with all the necessary tools, instruction manuals and warranty.

Learning capabilities

- Rockwell Hardness tests
- Brinell Hardness Tests
- Use of different indenters
- Range of materials to test

Technical Specification

- To have ability to undertake Rockwell and Brinell hardness tests in a single unit
- Ability to submit test loads of 60, 100, 150Kgf for Rockwell and 187.5Kgf with preload of 10Kgf to specimens
- To include test tables in Ø38 and Ø50mm and ‘V’ groove for round specimens
- Indenters supplied
- Dial gauge readout of ‘B’ and ‘C’ scales
- Automatic selection of loading weights
- Rubber bellows for protection of elevating screw
- Hardness tables supplied for referencing

Essential Ancillaries

- HSM51A Set of Hardness Specimens for HSM51 (contains 5 x aluminium, 5 x brass, 5 x copper, 5 x steel samples)

What’s in the Box?

- 1 x Rockwell/Brinell Hardness Test Unit
- 1 X Brinell Microscope
- 1 X Set of Brinell ball indenters (1 x Ø1/16” Ball Indenter,, 1 x Ø2.5mm Ball Indenter, 1 x Ø5mm Ball Indenter)
- 1 x Diamond Indenter with 120° point angle
- 1 x Ø38kmm Test Table with integral ‘V’ groove for round samples
- 1 X Set of Test calibrated test blocks
- 1 X Set of test specimens (1 x aluminium, 1 x brass, 1 x copper, 1 x steel)
- 1 x manual

Weights & Dimensions

- Net dimensions: 470mm (L) x 220mm (W), 850mm (H)
- Net weight:137 Kg approximately

Essential Services

- Firm table to support the weight of the unit
- During operation of the apparatus, the elevation screw will pass below the bottom of the apparatus base by upwards of 150mm
- To allow full, unrestricted movement of the elevation screw, the table must have a through hole of diameter Ø50mm (or Ø2”) created within it
- The unit must be positioned on the table in a stable location, not near the edge. Only then should the through hole be created

Operational Conditions

- Storage temperature: -10°C to +70°C
- Operating temperature range: +10°C to +50°C
- Operating relative humidity range: 0 to 95%, non condensing

Ordering information

To order this product, please call PA Hilton quoting the following code:
HSM51 ROCKWELL/BRINELL HARDNESS TESTER

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COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS