PHBR-300 AUTOMATIC MAGNETIC BRINELL & ROCKWELL HARDNESS TESTER

QMN EQUIPMENT

INTRODUCTION

PHBR-300 Automatic Magnetic Brinell & Rockwell Hardness tester takes the traditional Brinell & Rockwell hardness testing method the same as the desktop hardness tester, and the test procedure and test accuracy are in accordance with ASTM E10, ASTM E18, ASTM E110; ISO6506, ISO6508. It is fixed to the testing position of large steel workpieces by magnetic suckers. For Rockwell, one key operation will get accurate and reliable testing results; For Brinell, one key operation will complete high quality test force loading and get the Brinell indentation, And then you can get Brinell indentation and finally get the Brinell hardness value through 40X microscope or Automatic Brinell indentation measurement system.



PHBR-300

APPLICATION

- Suitable for steel material of different shapes such as pipes, bars and plates.
- Suitable for large casting, forging, shaft, mold and other large heat-treated parts.
- Used for on-site hardness testing of installed pipelines.
- Can completely replace the inaccurate and unreliable Leeb hardness tester.

FEATURES

- Structure of PHBR-300 is compact and reasonable. Compared with PHBR-200 Digital Magnetic Hardness Tester, PHBR-300 has smaller size and close weight.
- Turn on the magnetic switch, and fix the hardness tester on the measured workpiece, one key operation can automatically complete the loading, maintaining and unloading of the test force, which saves time and has good stability.
- Applying High-accuracy force transducer, advanced closed loop measurement and control motor loading technology to ensure accurate and reliable test force value and good uniformity.
- Applying rechargeable lithium-ion battery, convenient to dismantle and change, suitable for continuous multi shift production and multi day on site testing.
- The OLED display can show the test procedure status and real-time test force value, which is convenient for the operator to monitor the loading force process.
- Lighting is provided above the indenter for easy observation and selection of test position.

TECHNICAL PARAMETERS

Rockwell Initial Test Force:	10 kgf
Rockwell Total Test Force:	60 kgf , 100 kgf , 150 kgf
Brinell Test Force:	187.5 kgf
Test Cycle Duration:	15 s~18 s (including 10 s holding time of test force for Brinell)
Battery Life:	around 400 times
Test Range:	100~650 HBW , 20~70HRC, 20~100 HRB, 20~88 HRA
Test Resolution	0.1HR or 0.005 mm(indentation diameter)
Indication Error:	Complying with ISO 6508,6506; ASTM E18, E10, E110
Repeatability Error:	Complying with ISO 6508, 6506; ASTM E18, E10, E110
Test Force Error:	± 1 %
Test Force Fluctuation:	0.2 kgf
Working Temperature:	0~50 ℃
Dimension:	243 mm × 105 mm × 215 mm
Net Weight:	5.1 kg
Minimum Testing Surface:	Flat 195 mm × 60 mm × 5 mm (Length*Width*Thickness) Cylinder 60 mm × 200 mm × 8 mm(Diameter*Length*Thickness)

STANDARD ASSEMBLY

Tester
40x Reading Microscope
Iron Seat/Base
Cylindrical Surface Adaptor
120° Diamond Indenter
1/16" Carbide Ball Indenter
2.5mm Carbide Ball Indenter
Rockwell Hardness Block
Brinell Hardness Block
Carrying Case

OPTIONAL ASSEMBLY

Brinell Indentation Measurement System
Industrial Tablet Computer with rechargeable Lithium-ion Battery