

PHBR-200

MAGNETIC DIGITAL BRINELL AND ROCKWELL HARDNESS TESTER

TX TESTING INSTRUMENTS

DESCRIPTION

World initial Magnetic Digital Brinell and Rockwell Hardness Tester, which can make accurate Brinell hardness test with conventional indentation method of ISO 6506.2 and ASTM E10. It can also make rapid Brinell hardness test with depth-measuring method of ASTM E103, and read hardness value directly. At the same time it also can do Rockwell hardness test according to Rockwell hardness testing method in ISO 6508.2 and ASTM E18. These functions can meet the demand of precise and rapid Brinell hardness testing on-site of large steel and iron parts.

Simplified operation of Rockwell hardness and depth-measuring Brinell hardness very simple with high efficiency.

This instrument stores an accurate basic hardness, that is depth curve made from plenty hardness blocks. It also stores several Brinell curves of common materials. We can supply the service of

making precise Brinell curve of common material according to customers' requirement. Advanced curve correction methods can be used to test a variety of special materials.

This instrument can check and calibrate the accuracy on-site by precise indentation method at any time.



PHBR-200

INSTRUMENT FEATURES

- **Accuracy:** Accurate force value. Test accuracy of Indentation Brinell Method as well as Rockwell test comply with ISO and ASTM standard. Depth-measuring Method accuracy can satisfy on-site test request.
- **Speediness:** Simple operation, high efficiency, test time less than 10s.
- **Stability:** Excellent stability and repeatability, reliable values transfer, keep test accuracy unchanged for a long time.
- **Testing On-site:** Insensitive to temperature changing on workshop.
- **Unique Method:** Test by absorbing to iron and steel parts, and it can finish the test by unilaterally touching the parts. It can test any dimension parts, especially steel tubes and weld on pipes.

MAIN TECHNICAL PARAMETERS

Initial Test Force:	10 kgf
Total Test Force:	60 kgf, 100 kgf, 150 kgf, 187.5 kgf
Testing Range:	20-88 HRA, 20-100 HRB, 20-70 HRC, 150-400 HBW
Testing Resolution:	0.1 HR or 1 HBW
Indication Error:	Comply with ISO and ASTM standards
Repeatability Error:	Comply with ISO and ASTM standards
Test Force Error:	≤ ± 1% Comply with ISO and ASTM standards
Operating Temperature:	5-45°C
Dimension:	245 (length) x 105 (width) x 138 mm (height)
Weight:	5.3 kg

STANDARD ASSEMBLY

Tester
120° Diamond Indenter
1.588mm Carbide Alloy Ball Indenter
2.5mm Carbide Alloy Ball Indenter
Rockwell Hardness Block
Brinell Hardness Block
40X Reading Microscope
Iron Seat
Recharger
Carrying Case

W SERIES

WEBSTER HARDNESS TESTER

TX TESTING INSTRUMENTS

INTRODUCTION

- A portable instrument which can perform on-site hardness test on aluminum alloys. The test result can be got with only a simple clamp. It is convenient, efficient and reliable.
- Webster hardness tester is the preferred instrument for testing aluminum alloys mechanical performance in accordance with American standard ASTM B647.
- Used for quick test the hardness of aluminium profiles, tubings, sheets, accessories and other soft metal. Especially suitable for quick, non-destructive on-site 100% final products qualification test.
- Webster hardness tester can be also used for testing hardness of copper, brass and soft steel.

TECHNICAL PARAMETERS

Testing Range:	0 - 20 HW (equivalent to 20 - 110 HRE, Model W-20)
Resolution:	0.5 HW (5 - 17 HW)
Repeatability:	0.5 HW (5 - 17 HW)
Weight:	0.5 kg

STANDARD ASSEMBLY OPTIONAL ACCESSORIES

Tester	Indenter
Standard hardness block	Standard hardness block
Spare indenter	Dial glass
Calibration wrench	
Small screwdriver	
Carrying case	
Dial assembly	

FEATURES

- **Indenter:** Re-engineered with advanced material and new production technology manufactured, higher hardness, long service life, good interchangeability.
- **Indicator Hand:** High strength indicator hand, less likely to be bent by long-term using or mis-operation.
- **Dial Glass:** High strength, high toughness, uneasy to be broken or scratched.
- **Handle:** Forged aluminum alloy handle with fine anodized finishing, high resistance to abrasion and stain.
- **Hardness Blocks:** Tested by standard rockwell hardness tester, the hardness block are attached with test report.
- **Stability:** Stable full scale point, stable calibration point, indicator never glides.
- **Conversion:** Results can be converted to Vickers, Rockwell and Brinell.



W-20



W-20a



W-20b

MODELS

- W-20: the most popular model, used to test normal aluminum profiles.
- W-20a: used to test aluminum profiles with thickness within 13 mm.
- W-20b: used to test aluminum tubings with inner diameter over 6 mm.
- W-B75: used to test brass tubings and brass sheets.
- W-BB75: used to test copper tubings and copper sheets.
- W-B92: used to test soft stainless steel sheets, cold-rolled steel, etc.