

OVERVIEW

The PHB-3000E electric portable Brinell hardness tester is a patented product, first released in year 2021. Taking hydraulic principle, by one key operation, the tester can produce a test force of 3000kg on a 10mm ball. The test method fully conforms to ISO 6506 and ASTM E10. Compared to other portable Brinell hardness testers, it has the characteristics of maintaining test force according to the ASTM E10 requirement, simple operation and labor-saving, and weight of the instrument is not increased.

FEATURES

- **Holding Test Force:** One key operation can complete the loading and holding process of test force, in line with the standard of Brinell hardness test method requirements, the measurement results can be more widely accepted.
- **Simple and Labor-saving.** No need to pull the load handle, greatly reducing the operating intensity.
- **Clear Indication.** The working status of the tester can be observed from the indicator light.
- **Field Testing.** It can be used in the workshop, the operation is simple, can test the hardness of large parts body, can be used for piece-by-piece testing.
- **Permanent Indentation.** Using 3000kgf test force, 10mm ball indenter, permanent indentation can be used for reinspection.
- **High Reliability.** In accordance with the Brinell hardness test principle, same principle as desktop Brinell hardness testers, reflecting the overall mechanical properties of materials or parts.
- **High Precision.** Test force accuracy in accordance with ISO and ASTM standards. Hardness test accuracy is equivalent to bench type testers.
- **Custom Build Available.** The test force and the ball indenter can be choosed and calibrated before delivery.



PHB-3000E

APPLICATION

- On-site test of steel products, non-ferrous metal, casting, forgings and semi-finished heat treatment parts.
- It can be used for all kinds of large parts that cannot be tested on a desktop, and can replace the low accuracy and reliability of the Leeb hardness tester in a wide range of manufacturing fields.
- Indentation could be read by Brinell indentation measurement system and hardness values displayed directly.

TECHNICAL PARAMETERS

Test Force:	3000 kgf(1000 kgf、750 kgf、500 kgf optional)
Indenter:	10 mm carbide ball (5 mm optional)
Test Range:	95~653 HBW
Capacity:	350 mm (height) x 100mm (depth)
Indication Error:	complies with ISO 6506-2 and ASTM E10
Repeatability:	complies with ISO 6506-2 and ASTM E10
Test Force Error:	complies with ISO 6506-2 and ASTM E10
Battery Life:	About 450 tests
Net Weight:	13.7 kg

STANDARD ASSEMBLY

Electric test head (built-in lithium battery)
 Lifting support
 Brinell hardness test block
 Anvil (Flat, V-type, Dome type)
 20X Reading Microscope
 10mm spare Carbide ball (Another one is in test head)
 Recharger

OPTIONAL ACCESSORIES

Brinell hardness test block (high value or low value)
 Carbide ball (5mm, 10mm)
 Spare parts maintenance (hydraulic oil, oil sac, O-ring, etc.)
 Maintenance tool kit
 Brinell Indentation Measurement System
 Spare lithium battery pack