

Product Information

ZHB3000 Full Load Brinell Hardness Tester



Manual measurement with HiLight portable microscope



Automatic measurement with BOSS

Range of application

The ZHB3000 is an inexpensive dead weight, bench mounted Brinell hardness tester which meets the needs of a wide range of Brinell applications, ranging from occasional laboratory testing to continual testing in a foundry environment with high accuracy and low service costs (Brinell testing to ISO 6506 and ASTM E10, UKAS accredited).

Comprehensive test force range:
187.5, 250, 500, 750, 1000, 1500, 3000 kgf

Deadweight Design for High Accuracy

The ZHB3000 system applies precise loads using a dead-weight design. A pneumatic cylinder ensures the load descends smoothly thus ensuring there is no impact effect on the test specimen and lifts the load at the end of the test cycle. This simple load system does not require frequent monitoring or repeated calibration for each load change.

Economical to Own and Operate

This simple and rugged Brinell testing system comes at a very competitive price.

Low Service Requirements

The ZHB3000 has few moving parts which are critical for proper load application. High quality materials and parts are used to ensure the tester has a long life. This is essential for industrial Brinell hardness testers which are often used in hostile environments.

Easy Semi-Automatic Test Operation

The semi-automatic test sequence ensures the test is performed in accordance with internationally recognised standards. The operator raises the elevating screw until the specimen is seated. At the press of a button the test force is applied and then removed after a preset time.

Different loads can be applied by adding or removing weights. Three push buttons control the test sequence dwell time.

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Specification	
Scales (Brinell)	2.5/187.5 5/250, 5/750 10/250, 10/500, 10/1000, 10/1500, 10/3000
Total Loads (Brinell)	187.5, 250, 500, 750, 1000, 1500, 3000 kgf
Calibration	ISO 6506 & ASTM E10
Load Dwell Times	12, 30 or 60 s
Standard Specimen Accommodation	Vertical: 228 mm (9") Throat: 114 mm (4.5")
Electrical Services	5A single phase, 220 or 110 V
Shipping Details	865 x 228 x 710 mm; 260 kg

Standard Accessories	ZHB3000
100 mm Ø flat anvil	•
75 mm vee anvil	•
10 mm Ø tungsten carbide ball indenter	•
Brinell test block (non-UKAS)	•
Vinyl cover	•
Operation manual	•
Wall chart	•
Accessory case, spare fuse and tools for setup	•

- already included in the scope of supply

Optional Accessories	Part Number
Specially designed component fixtures	-
2.5 mm Ø ball indenters	2111561
5 mm Ø ball indenters	2111559
Compressor, 6 bar (an air compressor is required for the ZHB3000 to function)	2111552

Recommended Measurement Devices	Part Number
BOSS	2111553
HiLight microscope	2111554
HiLight + micrometer	2111555