

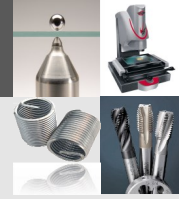
## ELECTRIC BRINELL HARDNESS TESTER

### KHB-3000E

The Brinell hardness testing creates the largest indentation comparing all other hardness testing methods. It is able to reflect the comprehensive features of the material, and is unaffected by the microstructure and inhomogeneous of the specimen. So it with high precision and widely used in industry such as metallurgy, forging, casting, unhardened steel and nonferrous metals, as well as in the laboratories, universities, and scientific research institutes.

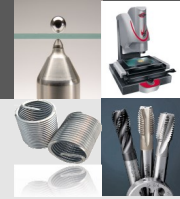
KHB-3000E Tester conforms to:

- ISO6506 Metallic Materials-Brinell Hardness Test
- ASTM E-10 Test Method for Brinell Hardness of Metallic Materials



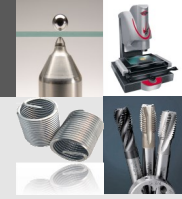
## Specification:

- Innovative closed-loop technology. The tester incorporates the latest load cell technology. The test load is applied via a closed-loop control unit with a load cell, a DC motor and an electronic measurement and control unit. The result is highly accurate measurements at all test loads up to 0.5%. The common load overshoot or undershoot as known from traditional dead weight, or open-loop, systems is eliminated. The absence of mechanical weights not only eliminates friction problems but also makes the equipment less sensitive to misalignments caused by vibrations.
- The whole weight of the tester is 50% less than the traditional dead weights type tester.
- Test load selection by keyboard and LCD screen. No need of handling heavy weights or cleaning the messy oil.
- Fully automatic test cycles. The hardness Tester features a fully automatic test cycle, load application, holding, unloading, is performed fully automatically. This greatly improves reproducibility of test results since operator influence is eliminated.
- Selectable dwell times by screen. The indenter, load, and other test informations are showing clearly on the large LCD screen.
- The directions for  $0.102F/D^2$  ratios selecting according to the materials and hardness range can be showing on the screen.
- 20X Microscope with LED lighting source make the indentation more distinguishable and improving the measure accurate.



## Technical data:

Loads : 3000kgf (29400N), 1500Kgf (14700N), 1000Kgf (9800N), 750Kgf (7355N) , 500Kgf (4900N), 250Kgf (2452N), 187.5Kgf (1839N), 125Kgf (1226N), 100Kgf (980N), 62.5Kgf (612.9N)		
Load dwell duration: 2s~99s, can be set and stored		
Tungsten Carbide Ball indenter: 10mm		
Measuring range: 3.18HBW~658HBW		
Magnification of the microscope: 20X		
Resolution capability of the microscope: 0.005mm		
Accuracy of Brinell Hardness Value:		
Hardness Range(HBW)	Error (%)	Repeatability(%)
≤ 125	± 3.0	≤3.0
125 < HBW ≤ 225	± 2.5	≤2.5
> 225	±2.0	≤2.0
Max measurable height 230 mm		
Max measurable depth: 140 mm		
Dimensions: 530mm×260mm×750mm		
Power supply: 220/110 V, 50/60 Hz, 4A		
Weight: 120kg		
Standard blocks: 125-350HBW10/3000, 125-350HBW10/1000		



Standard configuration ↗			
Host machine ↗	1 ↗	Flat anvil ↗	1 ↗
Standard block 125-350HBW10/3000 ↗	1 ↗	"V" shape anvil ↗	1 ↗
Standard block 125-350HBW10/1000 ↗	1 ↗	20X microscope ↗	1 ↗
Φ10mm Tungsten Carbide Ball indenter ↗	1 ↗	Power supply wire ↗	1 ↗
Mounting screws for indenter ↗	1 ↗	Dust cover ↗	1 ↗
Screwdriver for indenter mounting ↗	1 ↗	↗	↗
Optional accessories: ↗			
Standard blocks of other value ↗		Φ2.5mm Tungsten Carbide Ball ↗	
Φ5mm Tungsten Carbide Ball indenter ↗		Φ2.5mm Tungsten Carbide Ball indenter ↗	
Φ10mm Tungsten Carbide Ball ↗		Φ5mm Tungsten Carbide Ball ↗	