

# Digital Brinell Hardness Tester NOVOTEST TB-B-C





### **◆**Description **▶**

Digital Brinell Hardness Tester NOVOTEST TB-B-C implements direct resistance to indentation under Brinell method of hardness testing in accordance with **ISO 6506-2 and ASTM E10**.

Digital Brinell Hardness Tester NOVOTEST TB-B-C has 10 steps testing force settings, allows user to measure hardness values with each of 10 Brinell hardness scales. The device uses the round type of indenter along with the control system. It is highly accurate, gives repeatable results, reliable and easy to operate. Digital Brinell Hardness Tester NOVOTEST TB-B-C has fully automatically test cycle: loading, dwell and unloading. As a result, the operator errors don't influence on measuring results.

Motorized indenter and electronic control system allow making measurements with high accuracy. Absence of mechanical weighs reduce problems of friction and vibration sensitivity of the machine.



#### **◄**Application ►

Brinell hardness tester uses the heavy testing force (large indentation), which allows user to measure hardness:

- of coarse-grain metal materials (casted parts, non-ferrous metals and alloys);
- of various tempered steels, hardening and tempering steels;
- of products from soft metals (pure aluminum, lead, tin) and others.

#### ■Advantages

- 10 test loads
- Easy to choose the hardness scale
- Automatic controlling the force of load
- Easy in operation

#### **◄**Specification ►

Indenter	Hard alloy ball indenters (2,5; 5 and 10mm)
Scales Testing load	HBW2.5/62.5, HBW2.5/187.5, HBW5/62.5, HBW5/125, HBW5/250, HBW5/750, HBW10/100, HBW10/250, HBW10/500, HBW10/1000, HBW10/1500, HBW10/3000. 62.5kgf (612.9N), 100kgf (980.7N), 125kgf
	(1226N), 187.5kgf (1839N), 250kgf (2452N), 500kgf (4903N), 750kgf (7355N), 1000kgf (9807N), 1500kgf (14710N), 3000kgf (29420N)
Testing materials	<ul> <li>Cemented carbides, thin steel and shallow case-hardened steel;</li> <li>Steel, hard cast irons, pearlitic malleable iron, titanium, deep case-hardened steel &amp; other material harder than HRB 100;</li> <li>Thin steel and medium case-hardened steel and pearlitic malleable iron;</li> <li>Hardened and surface hardened steel, hardened and tempered steel; cold and hard casted parts, forged parts; hard alloy steel; aluminum alloys; bearing steel; carbonized steel sheets and others</li> </ul>
Hardness range	8-650 HB
Measuring time	5-60 sec
Microscope zoom	20X
Microscope accuracy	0.005 mm
Min. size of test sample	0.005 mm
Max height of test sample	220 mm
Max depth of test sample	135 mm
Power supply	220V±5%, 50~60Hz

## NOVOTEST

Data output	Microscope
	Built-in printer
	RS-232 interface
Recommended operating	Air temperature: 0+40 °C
conditions	<ul> <li>Air pressure: 94 – 106.7 kPa</li> </ul>
	Humidity: up to 65%
Net weight	130 kg
Gross weight	140 kg
Package dimensions	670*470*866 mm (L*W*H)

#### **◄Standard set**▶

- Brinell Hardness Tester NOVOTEST TB-B-C
- Hard alloy steel ball indenters (d=2.5; 5 and 10 mm 3 pcs. in total)
- External 20X measuring microscope
- Large testing table
- Medium testing table
- V-shaped testing table
- Brinell hardness test blocks (3 pcs. In total)
  - HBW/3000/10(150~250) − 1pc.
  - HBW/1000/10(75~125) − 1pc.
  - HBW/187.5/2.5(150~250) − 1pc.
- Bolt adjustor (4 pcs.)
- Power cable
- Fuse (2pcs.)
- Operating manual
- Calibration certificate
- Transportation box

#### **◄** Available options ►

- Indenters
- Standard hardness test blocks
- External 20X measuring microscope
- Large testing table
- Medium testing table
- V-shaped testing table
- Bolt adjustor
- Other kinds of power supply
- Power cable
- Fuse