



BANBROS ENGINEERING PVT. LTD.

The Precision Measurement People

TOUCH SCREEN ROCKWELL & SUPERFICIAL ROCKWELL HARDNESS

- *VALUE*
- *VERSATILITY*
- *PERFORMANCE*



BRST-20T

**DESCRIPTION:**

BRST-20T digital touch screen twin Rockwell hardness tester has high level automation, stable and reliable performance, it is equipped with sophisticated sensors so that can test data more accurate; Large touch screen provide comprehensive data for quality control.

- Load cell structure, no need installs dead weights
- With Rockwell & Superficial Rockwell test function;
- Select force on color touch screen, easy operate;
- Status bar show the test process in real time.
- With hardness conversion function (HV, HBW, etc.)
- With printer, test data can print out directly
- Test force - Indenter type show on screen, avoid mistakes
- Brightness is adjustable, to meet different visual habit
- Car paint processing appearance, looking beautiful
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FEATURES:

1. The color touch screen will display hardness value, conversion value, test force, dwell time, indenter info. etc. directly, indicator responses sensitively, show the hardness value accurately, the test value is more accurate than national standard;
2. Automatic loading - dwell - unloading test force, easy operate
3. Built-in printer can print test result directly
4. One-time casted molding shell, stable structure and it is not easy to be out of shape. It can work
5. under harsh environment; the shell coating adopted car paint technology with white color. it has strong scratch resistance capability and still look bright as new after use many years
6. The screw rod adopts the fine grinding process, which ensures that the machine can be lifted smoothly and without eccentricity, make test accuracy higher and more stable.

WORKING PRINCIPLE OF ROCKWELL HARDNESS TEST:

The Rockwell scale is a hardness scale based on indentation hardness of a material. The Rockwell test determines the hardness by measuring the depth of penetration of an indenter under a large load compared to the penetration made by a preload. There are different scales, denoted by a single letter, that use different loads or indenters. The result is a dimensionless number noted as HRA, where A is the scale letter.

APPLICATION FIELDS:

Suitable for quenched steel, tempered steel, annealed steel, cold and hard casting, malleable cast iron, hard alloy steel, aluminum alloy, copper alloy, bearing steel etc. Also suitable for surface quenched steel, surface heat treating and chemical treating materials, sheet, zinc layers, chrome layers, tin layers etc.

**Test Laboratories****Industrial QC control**

**TECHNICAL SPECIFICATIONS:**

Model No.	BRST-20T
Test force	60kgf (588.4N), 100kgf (980.7N), 150kgf (1471N); Initial force: 10kgf (98N) For Rockwell
	15kgf (147.1N) 30kgf (294.2N) 45kgf (441.3N); Initial force: 3kgf (29.4N) For Superficial
Scale	HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRH, HRK, HRL, HRM, HRR, HRP, HRS, HRV HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Conversion scales	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, H15N, H30N, H45N, H15T, H30T, H45T
Resolution	0.1HR
Hardness value range	HRA: 20-96, HRB:20-100, HRC:20-70, HRD:40-77, HRE:70-100, HRF:60-100, HRG:30-94, HRH:80-100, HRK:40-100, HRL:50-115, HRM:50-115, HRR:50-115 HR15N:70-94, HR30N:42-86, HR45N:20-77, HR15T:67-93, HR30T:29-82, HR45T:10-72
Loading Method	Automatic (Load, Dwell, Unload)
Dwell time	1-99s each step 1 second
Display of Hardness Value	Touch LCD screen
Data output	Built-in printer, RS232 port
Executive standard	ISO 6508, ASTM E18
Test space	Max. Height: 200mm; Throat depth: 160 mm
Power supply	AC220V, 50-60Hz, Single Phase
Machine size & N/W (Approx.)	520*240*720mm; 80kg

STANDARD ACCESSORIES:

Name	Quantity	Name	Quantity
Diamond indenter	1	Ø1.5875mm Ball indenter	1
Hardness block	6	Large, medium, V-type working table	Each One