Analog Rockwell Hardness Tester
NOVOTEST TB-R

◄Description►

Analog Rockwell hardness tester TB-R implements direct resistance to indentation under Rockwell method of hardness testing in accordance with **ISO 6508-2, ASTM E18.** The metal hardness testing method is based on the testing samples of resistance to indentation.

Rockwell hardness tester TB-R is reliable; also, it is very easy in operation and servicing. **Operator can directly see the result of hardness measuring on the tester dial.**

Rockwell hardness tester TB-R is a stationary type of hardness testers on a rigid rack. Rockwell hardness tester TB-R allows user to measure the hardness value by three hardness scales (HRA, HRB, HRC) with loads of 60, 100 and 150kgf. The device has a diamond tip as a cone with 120 degrees of the cone apex angle and the bead size of 1/16 inch (1.5875 mm).

Rockwell hardness tester TB-R is equipped with tables which are used for different types of the objects. It supplies with large and small flat tables, and V-

shape anvil. In addition, Rockwell hardness tester TB-R also is equipped with three Rockwell hardness standard blocks for checking or calibration of the tester.

The range of measurements can be varied from 20 HR to 100 HR (it is depending of scale).

◄Application►

The mechanical Rockwell bench hardness tester can be used for:

- hardness testing of products made of various kinds of steels, such as tempered cast iron and all sorts of alloys, stainless steel and others; tempered cast iron and all sorts of alloys;
- manufacturing of calibration test blocks, which can be used for calibration of portable hardness testers.

◄Advantages►

- High measurement accuracy
- Wide range of measurements
- Device is very usability and reliability, through the using high quality materials in the manufacturing
- Significant advantages from other methods of hardness testing of tempered steels
- Device allows user to test steel samples after various heat treatments
- Device allows test blocks verification for calibration of portable hardness tester

◄Specification►

Indenter	Conical diamond indenter (120 °): diamond tip as a cone with 120 degrees of the cone apex angle and the bead size of 1/16 inch (1.5875 mm)
Scales	20-88 HRA; 20-100 HRB; 20-70 HRC
Initial testing load (accuracy ±2%)	98,07N (10kg)
Testing load (accuracy ±1%)	588,4N (60kg); 980,7N (100kg); 1471N (150kg)
Measuring time	5~60 sec
Testing materials	• Cemented carbides, thin steel and shallow case-hardened steel; • Steel, hard cast irons, pearlitic malleable iron, titanium, deep case-hardened steel & other material harder than HRB 100; • Thin steel and medium case-hardened steel and pearlitic malleable iron.
Max height of test	200 mm

sample	
Max depth of test sample	165 mm
Data output	Dial indicator
Recommended operating conditions	• Air temperature: 0…+40 °C • Air pressure: 94 – 106.7 kPa • Humidity: up to 65%
Net weight	55 kg
Gross weight	65 kg
Package dimensions	630*500*860 mm (L*W*H)

◄Standard set►

- Rockwell Hardness Tester NOVOTEST TB-R
- Conical Rockwell diamond indenter (120 °)
- Hard alloy steel ball Rockwell indenter (d=1,5875 mm)
- Weight A, B, C (3pcs. in total)
- Large testing table
- Medium testing table
- V-shaped testing table
- Rockwell hardness test blocks (3 pcs. in total):
  - HRB: 90±10 – 1pc.
  - HRC: 65±5 – 1pc.
  - HRC: 25±5 – 1pc.
- Bolt adjustor (4 pcs.)
- Operating manual
- Calibration certificate
- Transportation box

◄Available options►

- Rockwell diamond indenter (120 °)
- Hard alloy steel ball Rockwell indenter (d=1,5875 mm)
- Other types of Rockwell scales
- Rockwell hardness test blocks
- Weight A, B, C
- Large testing table
- Medium testing table
- V-shaped testing table
- Bolt adjustor (4 pcs.)