



AUTOMATIC  
hardness testing



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The proper solution for any hardness control issue

**ERNST**

# BRE-AUT

automatic hardness tester



The BRE-AUT hardness tester tests the hardness based on the difference in penetration depth between preload and load, using loads and indenters requested for Brinell Standard testing. The results, after having been processed by a microprocessor, are shown on the display in Brinell values.

With this system testing time is reduced by 85% compared to the traditional Brinell method.

On request the Brinell hardness can be measured by automatic Brinell scanning system.

#### **IMPORTANT:**

The optical verification of the impression is always possible.

A very simple calibration procedure allows maintaining extremely accurate results even when testing different materials, modifying the relation between test material and indentation diameter.

Automatic sequence is given through push button, foot switch or other external impulse.

Standard type test cycle starts as follows:

- The test head moves towards the test piece, driven by an hydraulic cylinder.
- The indenter comes into contact with the test surface.
- Preload is applied.
- Then full load is applied for the time chosen by the operator.
- The measuring head returns to preload position.
- Readout of Brinell result on large graphic LCD display.

**The entire test sequence takes about 7 seconds (that means testing up to 500 pieces per hour).**

The BRE-AUT hardness tester has a unique automatic safety device, which in case of wrong positioning of the piece or contact with soft material (e.g. operator's hand) retracts immediately the test head, avoiding specimen wrong tests and accidents.

# BRE-AUT

100 - 300



## BRE-AUT 100

### Technical Characteristics:

- Digital Brinell reading
- Measurable maximum height: 400mm  
depth: 200mm
- Test head stroke: 100mm
- Test loads
  - Regular type:  
3.000kp (29.430N)
  - Multiple loads:  
500kp (4.905N), 700kp (7.357N),  
1.000kp (9.810N), 3.000kp (29.430N)
- Adjustable loading time
- Standard accessories:
  - 1 flat anvil  $\varnothing$  120mm
  - 1 eyepiece 8x for verification of  
the impression diameter
  - 1 test block HB/30  
(95mm x 95mm x 16mm)
  - 1 set of wrenches



## BRE-AUT 300

### Technical Characteristics:

- Digital Brinell reading
- Measurable maximum height: 850mm  
depth: 250mm
- Test head stroke: 300mm
- Test loads
  - Regular type:  
3.000kp (29.430N)
  - Multiple loads:  
500kp (4.905N), 700kp (7.357N),  
1.000kp (9.810N), 3.000kp (29.430N)
- Adjustable loading time
- Standard accessories:
  - 1 flat anvil  $\varnothing$  120mm
  - 1 eyepiece 8x for verification of  
the impression diameter
  - 1 test block HB/30



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