



AT250
bench hardness tester



www.ernsthardeness testers.com

ERNST

AT250 I MAIN FEATURES

The reference point for the measure is the surface of the component itself, so even if operating following the Rockwell principle according to the international standards, measuring is not influenced by deflections due to incorrect placement, oxidation, grease, dust etc. as in traditional Rockwell testers. Surface preparation is needed only where measuring takes place.
With the simple movement of the lever pre-load and load are applied, with the return movement load is taken away and the result will be displayed.
Measuring takes no more than 3 seconds (a few more for very soft materials).

AT250 I ADVANTAGES

- It clamps difficult shaped overhanging pieces firmly to clamping cap
- Fast batch testing, components can be loaded on the anvil without moving the handwheel
- 4 stands available

AT250 I STANDS

STAND NX - conventional stand

maximum measurable: depth 240mm - height 210mm - weight 95kg

dimensions: L30cm x W60cm x H73cm

standard equipment: 4 anvils, 1 clamping cap, 1 cover

STAND TX - the most versatile

maximum measurable: depth 225mm - height 240mm (400mm without base assembly) - weight 125kg

dimensions: L30cm x W60cm x H95cm

longer columns can be supplied on request (+300mm +500mm)

standard equipment: 4 anvils, 1 clamping cap, 1 cover

STAND CAR - mobile stand

maximum measurable: depth 300mm - height 990mm - weight 165kg

dimensions: L950mm x W330mm x H1100mm

longer columns can be supplied on request (+300mm +500mm)

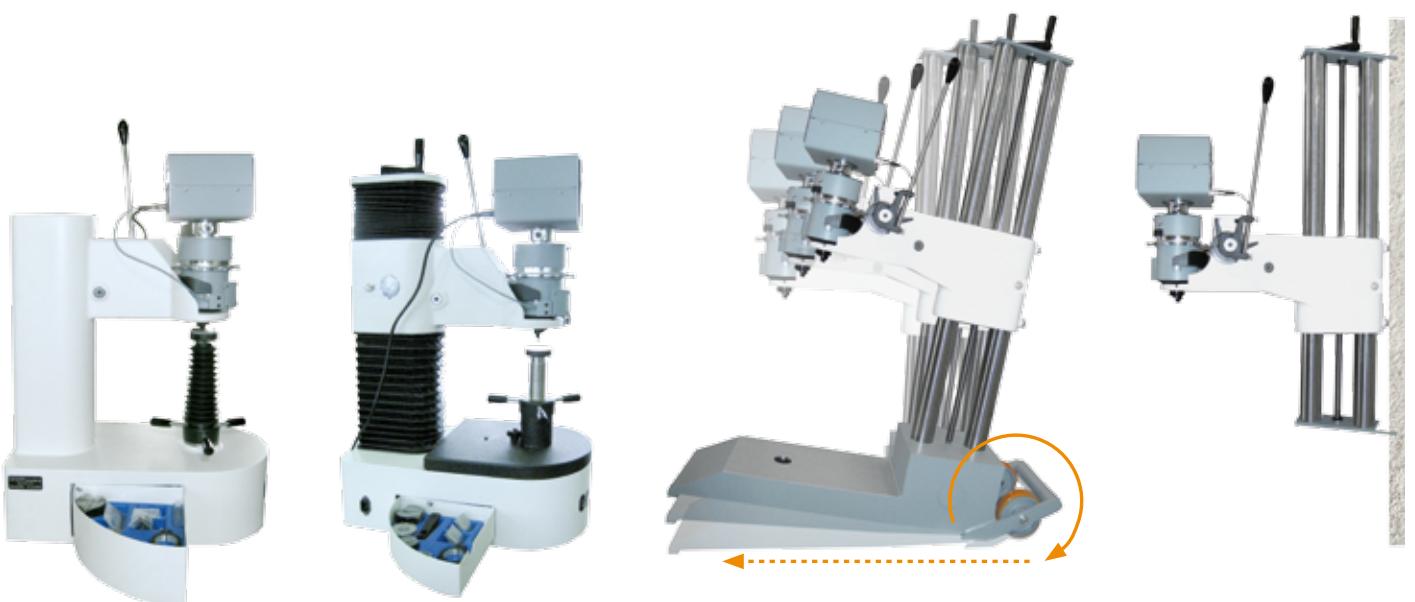
standard equipment: 1 clamping cap, 1 cover

STAND MUR - wall mounting

maximum measurable: depth 300mm - vertical adjustment 585mm - weight 115kg

dimensions: L300mm x W700mm x H1050mm

standard equipment: 1 clamping cap, 1 cover



STAND NX

STAND TX

STAND CAR

STAND MUR

STANDARD ACCESSORIES

- 1 Rockwell conical diamond indenter
- 1 Rockwell ball indenter 1/16"
- 1 Brinell ball indenter 2,5mm
- 1 Rockwell test block
- 1 Brinell test block
- 1 Flat anvil Ø 60mm
- 1 central raised anvil Ø 8mm
- 1 V-anvil for rounds Ø 3mm-12mm
- 1 V-anvil for rounds Ø 12mm-90mm
- 1 Plastic cover



ACCESSORIES ON REQUEST

- Optional output modules:
RS232, Bluetooth, Ethernet MODBUS-TCP, PROFIBUS, etc.
(maximum of installable modules: 2)
- USB printer with connection cable
- Set of 3 calibrated testblocks YAMAMOTO HRC
ISO6508, ASTM E-18:
25 HRC - 45 HRC - 62 HRC
certificated SIT, UKAS or equivalent
- Flat anvil ø 200mm
Flat anvil ø 120mm
- V-anvil for rounds up to ø 200mm
Adjustable anvil
- Rockwell ball indenter 1/8"
Rockwell ball indenter 1/4"
- Brinell ball indenter 5mm
Vickers indenter
- Bench for AT 250
- Software E-Datacapture ERNST



Measuring on bottles.

In AT 250 series measuring is not influenced by deflections. The use of the clamping cap and the insensibility to deflection and vibration, allows measuring even on large components.



Measuring on components of large dimensions is possible.

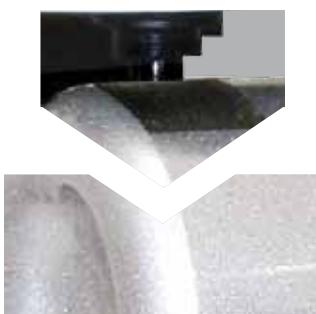
In this case the indenter has an extension of 50mm.
The base assembly has been removed.
On request the vertical capacity can be increased
by 300mm - 500mm



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AT250 | TECHNICAL DATA

■ Operating principle:

MOD DR: Rockwell

MOD DSR: Superficial Rockwell

■ Norms and certifications:

Rockwell - ASTM E-18 - ISO6508

■ Reading:

direct on touch-screen display

■ Display:

800 x 480 pixel 150 X 90 mm.

■ Preloads:

MOD DR: 10kgf (98.1N)

MOD DSR: 3kgf (29,4N)

■ Test loads:

MOD DR: 60kgf, 62.5kgf, 100kgf, 125kgf, 150kgf, 187,5kgf (N 588, 613, 981, 1226, 1471, 1839)

MOD DSR: 10kgf, 15kgf, 15.6kgf, 30kgf, 31.2kgf, 45kgf (N 98, 147, 153, 294, 306, 441)

■ Preload application:

automatic during load application

■ Load application method:

manual

■ Loading time:

selectable by touch-screen

■ Scale selection:

through touch-screen

■ Standard scales:

MOD DR: HRA, HRB, HRC, HRD, HRE, HRF, Brinell HB30

(HRG, HRH, HRK with optional penetrator cod. PENETRATORE 013)

MOD DSR: HR15N, HR30N, HR45N, HR15T, HR30T, HR45T

(HR15W, HR30W, HR45W with optional penetrator cod. PENETRATORE 013)

■ Other scales:

on request

■ Minimum measurable diameter:

4mm (cod. PENETRATORE 048 + and cod. GRUPPO 022)

■ Output interfaces:

STANDARD:

USB Printer - export on USB Key

OPTIONAL:

RS232 - RS485 - PROFIBUS - Ethernet MODBUS-TCP

Bluetooth

■ Power supply:

autosetting from 100VAC - 240VAC

■ Working conditions:

0°C-50°C

■ Selectable functions:

scale selection - load time - min. depth - mm/inch - rounds correction - calibration language - date/time - tolerances - dwell time - file - measure history - prints statistics - icons - conversions - sequence - password