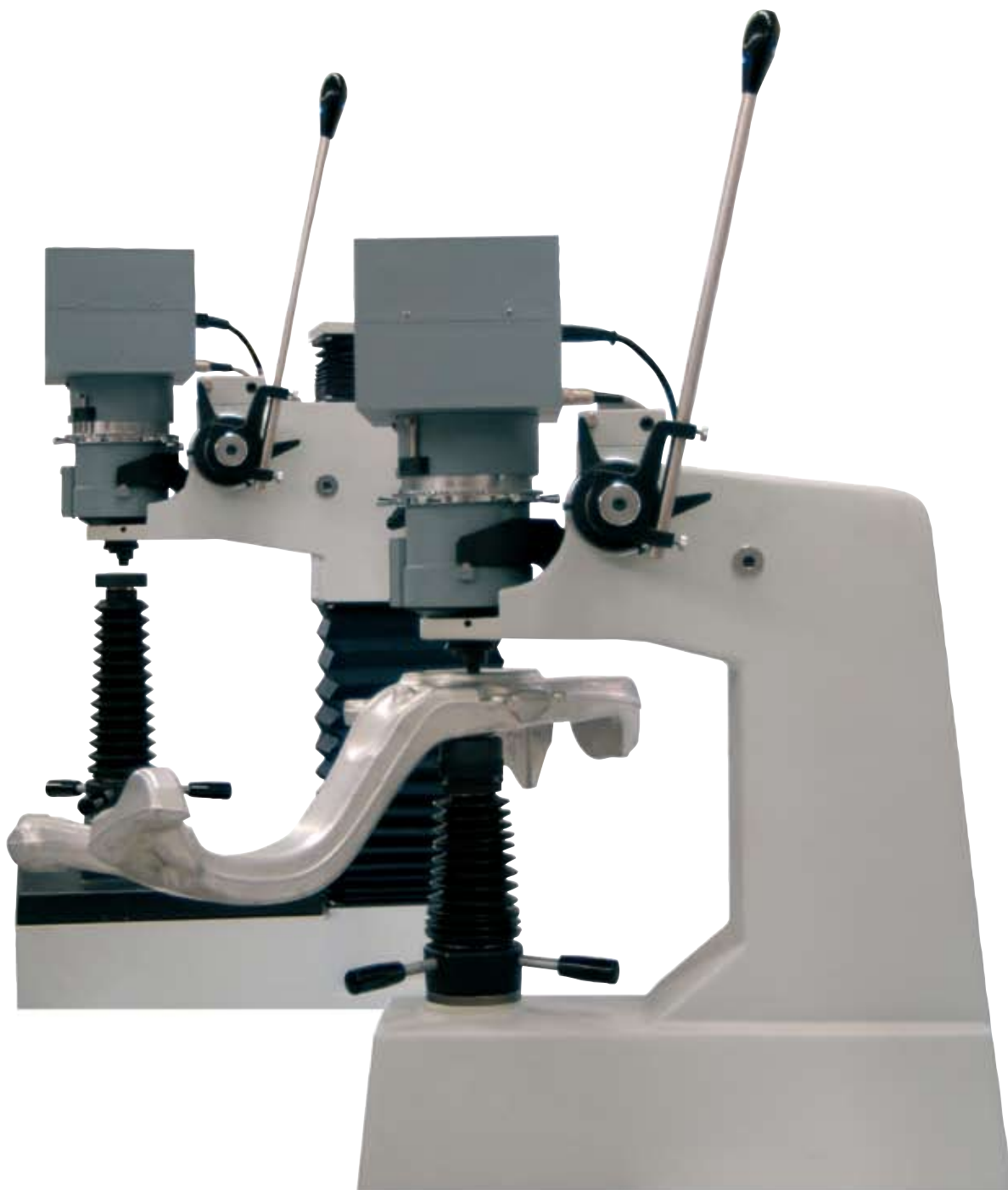


AT 130 D
Rockwell principle bench hardness tester



TSI System

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The proper solution for any hardness control issue

ERNST

AT 130 D

Not influenced by bending nor deflections
Simple, quick and precise
The clamping shield permits the measure of big and irregular pieces
Direct Rockwell and Brinell hardness reading
Its staunch structure and electronics makes
AT 130 D suitable for difficult environments



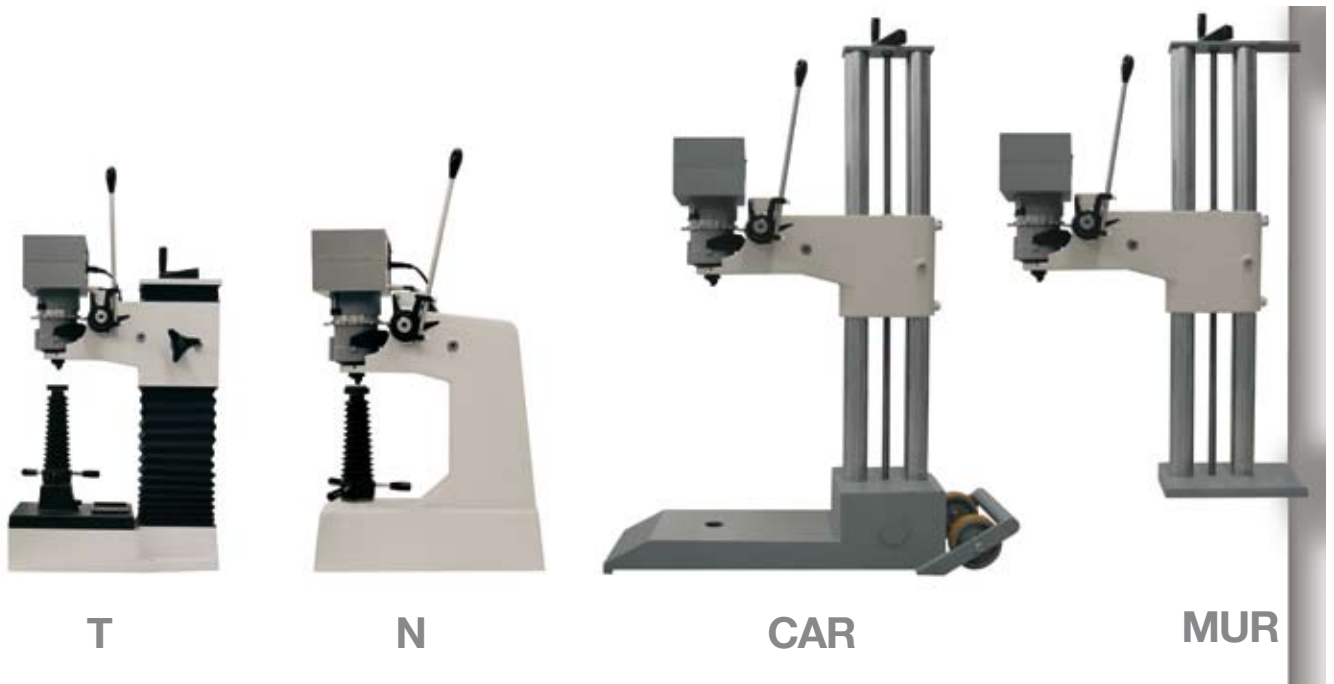
AT 130 DR/T

AT 130 D – MECHANICS

Even operating following to the Rockwell principle according to DIN and ASTM in AT130D series, measuring is not influenced by deflections. The reference point is the surface of the component itself. Surface preparation is needed only where measuring takes place. With an easy movement of the lever pre-load and load are applied. With the return movement, load is taken away, and reading is made. Measuring takes no more than 3sec. (a few sec. more for very soft materials).

AT 130 D – SYSTEM ADVANTAGES

- It clamps difficult shaped and overhanging pieces firmly to the clamping cap
- Fast batch testing, components can be loaded on the anvil without moving the handwheel
- Possibility to carry out testing according to standards on components of large dimensions

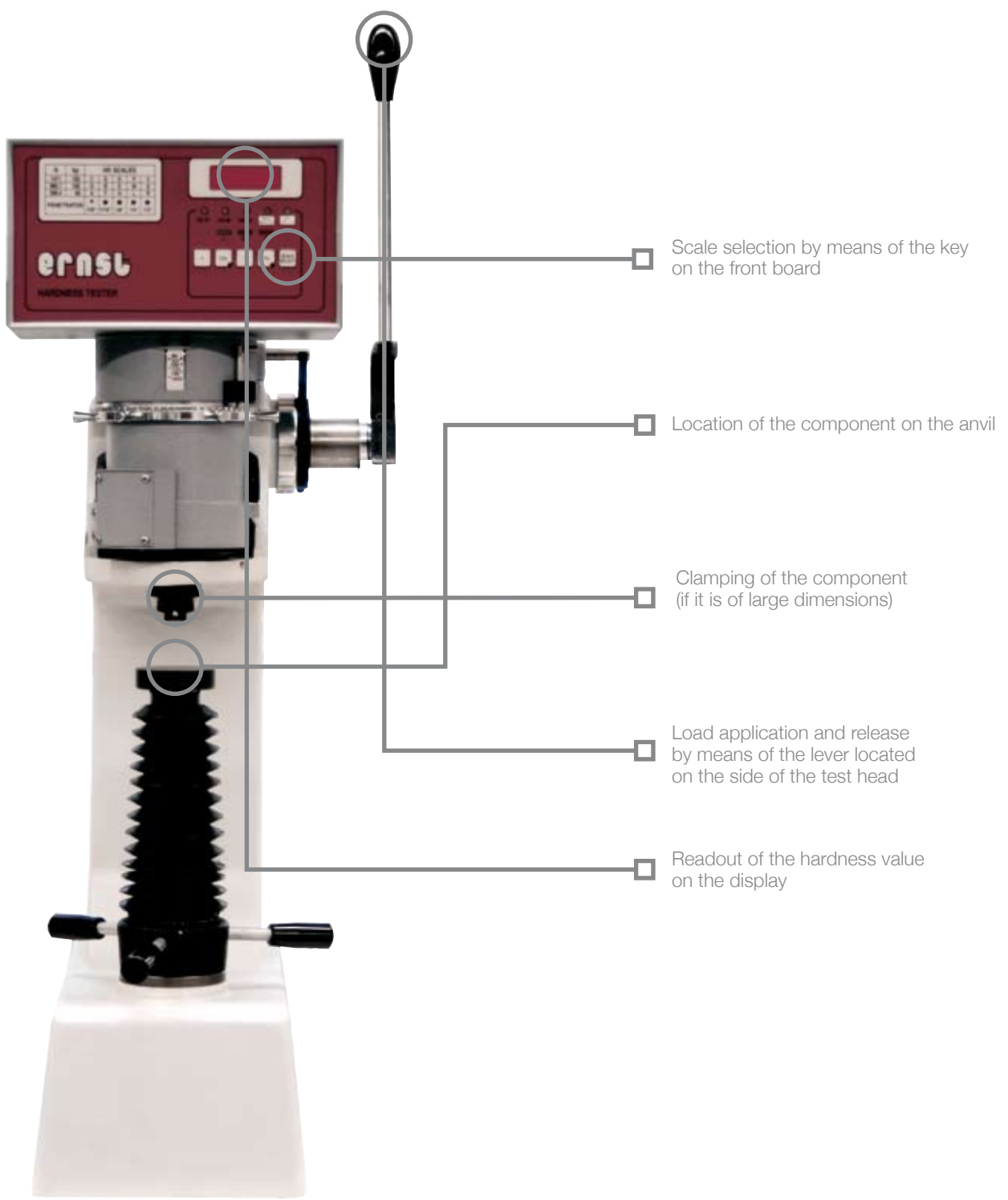


4 stands to choose from

- Stand T - the most versatile
- Stand N - conventional
- Stand CAR - mobile
- Stand MUR - wall mounting

Technical data concerning the stands is illustrated on the back of the brochure

AT 130 D - MEASUREMENT PROCEDURE



AT 130 DR/N

AT 130 DR/T

(AT 130 D with Rockwell test head and stand T)
 Measuring on components of large dimensions is possible.
 In this case the indenter has an extension of 50mm.
 The base assembly has been removed.
 The base is of 240mm x 330mm.



DATAVIEW32 - SOFTWARE

(Optional)
 Captures and stores hardness testing data on a computer and generates files, which are compatible with standard pc programs. Provides tolerance indicators, generates control limits and average values, generates X-bar and R charts, histograms, CPk, etc. Provides scale conversion, minimum thickness values and round correction; builds historical data files with descriptive information for true process control

AT 130 DR/T

(AT 130 D with Rockwell test head and stand T)
 Measuring on bottles.
 In AT 130 D series measuring is not influenced by deflections.



AT 130 DR/T - EXAMPLE: CLAMPING OF OVERHANGING COMPONENTS

(AT 130 D with Rockwell test head and stand T)
 The use of the clamping cap and the insensibility to deflection and vibration, allows measuring even on large components. Removing the base assembly, in the AT 130 DR/T version (picture 1 and 2), the component can be located directly on the base. On request the vertical capacity can be increased by 100mm - 300mm - 500mm, hence it is possible to test out, according to the standards, testing of components a weight of 200kg or 300kg.

AT 130 D - TECHNICAL DATA

TEST HEAD AT 130 DR

pre-load	10kp (98N)
Rockwell loads	60kp (588N) 100kp (980N) 150kp (1471N)
Brinell loads	62,5kp (612N) 125kp (1226N) 187,5kp (1839N)
incorporated scales	HRA - HRB - HRC - HRD HRE - HRF - HRG - HRH HRK - Brinell HB30
scales on request	HB2,5 - HB5 - HB10 kp/mm ² - N/mm ² - Vickers

TEST HEAD AT 130 DSR

pre-load	3kp (29,4N)
Rockwell loads	15kp (147N) 30kp (294N) 45kp (441N)
Brinell loads	10kp (98N) 15,6kp (153N) 31,2kp (306N)
incorporated scales	HR15N - HR30N- HR45N HR15T - HR30T - HR45T HR15W - HR30W - HR45W
scales on request	HB2,5 - HB5 - HB10 Vickers

AT 130 D STANDARD ACCESSORIES

Delivered in polished wooden box containing:

- 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 Flat anvil Ø 10mm
- 1 Large V-anvil
- 1 Small V-anvil
- 1 Plastic cover
- Spare balls
- Power supply cable

* accessories not included for AT 130 DSR version
(Superficial Rockwell)

AT 130 D ACCESSORIES ON REQUEST

- Flat anvil Ø 200mm
- V-anvil for rounds Ø 200mm
- Rockwell ball indenters 1/8", 1/4", 1/2"
- Brinell ball indenters 5mm
- C-form extension
for measuring internal parts
- Special clamping systems
on customer's request
- Vise for Jominy test
- Extended penetrators
and penetrator shrouds
(25mm - 50mm - 75mm - 100mm)
- Bench support for hardness tester

(see accessories catalogue code n°801-120EN01)

4 AVAILABLE STANDS



T



N



CAR



MUR

STAND T

depth 220mm - height 270mm (420mm without base assembly) - height on request (+100mm +300mm +500mm) - weight 87kg - base dimensions 240mmx560mm - base height 857mm - longer columns can be supplied on request - standard equipment: 4 anvils, 1 clamping cap, 1 cover

STAND N

depth 220mm - height 215mm - weight 53kg - base dimensions 200mmx520mm
base height 620mm - standard equipment: 4 anvils, 1 clamping cap, 1 cover

STAND CAR

depth 300mm - height 750mm - weight 140kg - base dimensions 250mmx970mm
base height 1350mm - standard equipment: 1 clamping cap, 1 cover

STAND MUR

depth 300mm - vertical adjustment 550mm - weight 90kg - dimensions: 200mmx700mmx1050mm
standard equipment: 1 clamping cap, 1 cover

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