



EAGLE
3000
automatic hardness tester



www.ernsthardnesstesters.com

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EAGLE 3000 | MAIN FEATURES

EAGLE 3000 is a Brinell hardness tester that performs hardness testing with test forces in the range 306.5 N to 29420 N (from 31.25 to 3000 kgf) in accordance with the standard EN ISO 6506, ASTM E10 for Brinell tests and allows to easily select the test force.

During any test, in any moment, the operator can get back to the procedure, whether to continue with a test sequence, to perform a specific test or to start a new sequence.

- EAGLE 3000 is conceived to allow repairing and maintenance in a fast and easy way, just by removing the test head.
- The software allows a completely automatic measurement of all indentations.
- The high precision 45° automatic rotating turret supporting penetrator and lenses allows to position exactly the impression's image on the screen for further measures.
- EAGLE 3000 is equipped with an integrated industrial PC with Windows platform, a 5MP Ethernet camera and a wide touch-screen.
- An additional display on the test head shows the applied load and loading time.
- EAGLE 3000 is endowed with an automatic safety system which can detect extraneous objects (eg. operators hand) and immediately retract the test head - along with a number of other safety systems studied for the operators protection (eg. test piece not correctly positioned on the anvil).
- EAGLE 3000 can send data to a printer or on a network. Every impression's image can be stored allowing a measure checking even a long time after the protocol emission or the data distribution through the net.
- EAGLE 3000 allows to set up the interface in English, French, German or Italian. Further languages are available on request.

EAGLE 3000 is designed to test specimens with a wide range of shapes and dimensions.



STANDARD ACCESSORIES

- 1 Objective lens 0.7x
- 1 Objective lens 3x
- 1 Brinell penetrator: ball 2,5mm
- 1 Brinell penetrator: ball 5mm
- 1 Brinell penetrator: ball 10mm
- 1 Brinell test block YAMAMOTO HB3000/10
 - 1 Flat anvil \varnothing 60mm
 - 1 Flat anvil \varnothing 120mm
- 1 V-anvil for rounds \varnothing 12-90mm
- 1 V-anvil for rounds \varnothing 27-200mm
- 1 Set of keys
- 1 Case for accessories

ACCESSORIES ON REQUEST

- Basements with dimensions on request
- Objective lenses with higher magnification
- Spare balls
- Flat anvil \varnothing 200mm
- Special anvils on request
- Kit of plugs for floor fixing
- USB printer with connection cable

EAGLE 3000 CAN TEST SPECIMENS WITH A HEIGHT UP TO 1200mm



For EAGLE 3000 a whole range of anvils have been designed to measure easily a large variety of different pieces.



EAGLE 3000 | TECHNICAL DATA

■ Working principle:

Brinell

■ Norms and certifications:

EN ISO 6506, ASTM E 10

■ Reading:

direct on industrial touch-screen monitor

■ Display:

20" 1600 x 1200 px

■ Lenses:

0.7x - 3x

■ Penetrator and lens selection:

Automatic by touch-screen through revolver system

■ Resolution:

0.001mm

■ Reading:

Automatic / Camera resolution 2560 x 1920 pixel

■ Camera:

5 MP

■ Loads:

31.25, 62.5, 125, 187.5, 250, 500, 750, 1000, 3000 Kgf

(306.5, 612.9, 1226, 1839, 2452, 4903, 7355, 9817, 29420 N)

■ Load application method:

Brushless electric engine working in closed loop with load-cell

■ Load selection:

Automatic by touch-screen

■ Load time:

Selectable by touch-screen

■ Scale selection:

Automatic by touch-screen

■ Incorporated scales:

HBW 2.5/ 31.25 - HBW 2.5/62.5 - HBW 5/62.5 - HBW 5/125 - HBW 2.5/187.5 - HBW 5/250

HBW 10/250 - HBW 10/500 - HBW 5/750 - HBW 10/1000 - HBW 10/3000

■ Other scales:

HBW 5/31.25 - HBW 10/100 - HBW 10/125 - HBW 10/1500

■ Output interfaces:

USB 2.0, Ethernet

■ Working area dimensions:

H max 1.200 mm

H max with elevating screw 600 mm

H max with intermediate bench and w/elevating screw 800 mm

P 300 mm

■ Power supply:

230V 50Hz

■ Power consumption:

220VA

■ Working temperature conditions:

0-50°C

■ Gross weight:

835kg

■ Net-weight:

800kg

■ Dimensions:

H 2046mm

W 1303mm (with extended monitor)

L 752mm

■ Security systems:

Test head stops and retracts automatically in case it is hit or in contact with a soft object

