



Automatisierung und Qualitätssicherung

NEXUS[®] 7000 SERIES

Universal hardness testing system



The NEXUS 7000/250 hardness tester features a user-friendly operator panel displaying hardness values for all common hardness test procedures. Load cell, force feed back, closed-loop load technology avoids overshoot and guarantees accurate test forces at each hardness test scale. The NEXUS 7000/250 combines a fully-automatic controlled test cycle with a wide load range from (0.5)*, and 1 - 250 kgf (*Optional). The easy to operate user panel gives access to 99 different test programs in 3 different hardness scales (HR, HB, HV). The programmable user panel allows easy access to user-defined test programs, including test force, application time, conversion, and shape correction according to ISO standards.

The interchangeable objectives, ranging from 20x - 140x, provide a wide application field within the automotive, aerospace, and general manufacturing industry.

The new INNOVATEST NEXUS series stands for:

- Accurate test force
- Highly accurate measurement
- Excellent Gauge Repeatability & Reproducibility
- Efficient and flexible use

The NEXUS 7000 series offers all of these options and can be configured to almost any requirement; extended working range, automatic spindle, Video imaging system, auto measuring system, filar system or directly connected to a PC, exporting data to MS Office applications.



Colour: Laboratory White

FEATURES:

- Load cell, force feedback, closed loop system
- Wide test load range up to 250Kgf
- Complies to all applicable EN/ISO and ASTM standards
- Shape correction values for curved surfaces
- High-quality depth measuring system (Rockwell, HBT, HVT)
- Very user-friendly, low training requirements
- Possibility to store 20 batch files with 50 measuring results each
- Direct printer and/or PC connections via RS232 and USB-2

Suitable to determine the hardness of castings and forgings, meets a wide variety of applications within the automotive and aerospace industry

TECHNICAL SPECIFICATIONS

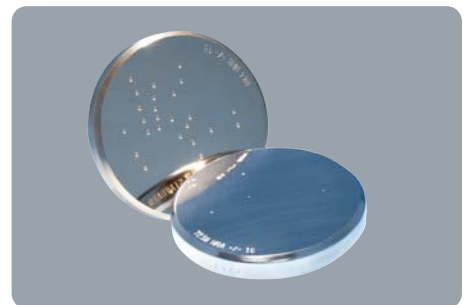
• Hardness scales	Brinell, Vickers, Rockwell
• Load application	Load cell, force feed back, closed loop system
• Load range	1 - 250 kgf
• Optical system	High precision optical path, screen diameter 135mm
• Objectives	Interchangeable 20x, 44x, 70x, 140x magnification
• Scale Resolution	0.001mm (1 micron)
• Display	Full function LCD screen, testing results, statistics, built in hardness calculator, etc.
• Standards	Complies to all applicable EN/ISO and ASTM standards
• Test loads	(0.5*) 1, 2, 2.5, 3, 5, 10, 15, 15.625, 20, 30, 31.25, 45, 50, 60, 62.5, 100, 125, 150, 187.5, 250 kgf (*Optional)
• Vickers test range	HV (0.5*), 1, 2, 3, 5, 10, 20, 30, 50, 100 HVT 50, 100kgf
• Brinell test range	HB1/1, 2.5, 5, 10, 30kgf; HB2.5/6.25, 15.625, 31, 25, 62.5, 187.5kgf; HB5/ 25, 62.5, 125, 250kgf; HB10/ 100, 250kgf; HBT2.5/62.5, 187.5kgf; HBT5/250kgf
• Rockwell test scales	A, B, C, D, E, F, G, H, K, L, M, P, R, S, V, Bm, Fm, Ralphi, 15N, 30N, 45N, 15T, 30T, 45T, 15W, 30W, 45W, 15X, 30X, 45X, 15Y, 30Y, 45Y, 30TM, HMR 5/25
• Test cycles	Automatic & Manual
• Indentors (Optional)	Brinell / Balls 1 - 2.5 - 5 - 10 mm; Vickers Diamond 136° Rockwell Diamond Cone 120° Rockwell balls 1/16", 1/8", 1/4", 1/2"
• Force control	2- 99 seconds
• Data Output	RS-232 Serial Interface (printer/PC), USB
• Specimen accommodation	TYPE A: Max. height: 300mm (standard) Max. throat: 150mm (standard) TYPE B: Max. height: 450mm Max. throat: 150mm TYPE C: Other dimensions on request
• Cylindrical Surfaces	Starting at 3mm diameter
• Dimensions	TYPE A: 250 mm x 567mm x 1030mm TYPE B: 250 mm x 567mm x 1180mm
• Weight	TYPE A: 201 kg, TYPE B: 212 kg,
• Power Supply	220V / 50Hz other voltages and/or frequencies on request
• Guarantee	2 years limited guarantee

STANDARD ACCESSORIES

- Main unit
- Rockwell C indentor
- Vickers indentor
- Brinell indentor 2.5mm
- Testblock HRA
- Testblock HRC
- Testblock HRB
- Testblock HV30
- Testblock HB2.5/187.5
- 70x objective
- 140x objective
- Clamping protection nose
- Testing table 80mm
- Installation & user manual
- Calibration certificate
- Toolset

OPTIONAL ACCESSORIES

- Objectives for 10x, 20x, 44x, 250x
- Testing table 150mm
- Testing table 235mm
- V-Anvil 80mm
- V-Anvil 120mm
- Certified indentors & testblocks
- Long Vickers indentor
- Other testing tables and XY-stages
- Precision vices, V-blocks and special clamps
- Software solutions for advanced applications





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