

## Motorized tester 3000kgf with digital display for Rockwell, Brinell and Vickers

A comprehensive range of hardness testing procedures offered by one machine: Rockwell, Vickers, Vickers depth, Brinell and Brinell depth. Extremely short test cycle without overshoot thanks to the closed loop system.

Very user-friendly because of a high degree of automation and low training requirements, such as setting up test programs with preset test parameters. The TESTOR® PANEL determines and digitally displays hardness values for all hardness test procedures. A large number of additional functions are provided such as conversions, timing, tolerances, corrections for cylindrical surfaces, statistical values. Direct printer and/or PC connection possible by RS232.

Solid design resulting in high precision readings satisfies all testing standards (i.e. the machine can be used for ruling and acceptance tests). Tables for depth measurement internally generated, thus adaptable to all materials.

### TECHNICAL SPECIFICATIONS

Hardness scales	Brinell, Vickers, Rockwell
Optics	High precision optics, screen diameter 135mm
Objectives	Interchangeable 20x (standard), 44x - 70x - 140x magnification
Scale resolution	Incremental scale / better than 1 micron
Display	Integrated hardness calculator, determination of hardness values for all procedures, statistics functions, data transfer
Standards Conform to	DIN-EN-ISO6506,6507, 6508, ASTM and JIS
Test loadtype	Closed loop control system
Test cycle	Automatic
Test load range	30 - 3000kgf
Vickers scales HV &HVT	HV30 - HV 50 - HV100
Brinell scales HB & HBT	HB1/:30 - HB2,5/31,25 - HB2,5/62,5 - HB2,5/187,5 HB5/25 - HB5/62,5 - HB5/125 - HB5/250 - HB5/750 HB10/100 - HB10/250 - HB10/500 - HB10/1000 - HB10/1500 - HB3000 HBT2,5/62,5 - HBT2,5/187,5 HBT5/250 - HBT5/750 HBT10/500 - HBT10/1000 - HBT10/1500 - HBT10/3000
Rockwell scales	A - B - C - D - E - F - G - H - K - L - M - P - R - S - (60 - 100 - 150 kg) V - Bm - Fm - Ra - HMR
Indenter types (optional)	Brinell Ball 1 - 2.5 - 5 - 10mm Vickers Diamond cone 136° Rockwell Diamond cone 120°, Ball 1/16" - 1/8" - 1/4" - 1/2"
Load duration	0.1 - 255 sec
Data output	RS232 serial interface (to printer or pc)
Specimen accommodation	Maximum test height 700mm, maximum throat 300mm
Specimen access	External surfaces, Cylindrical surfaces down to 3mm diameter
Power supply	220V / 50Hz (110V on request)
Machine dimensions	Width 465mm, depth 1125mm, height 1929mm
Machine net weight	710kg (motorised version net weight 800kg)

*On special request the 971/750 is available, with a load range of 5 – 750kgf*

# UNIVERSAL HARDNESS DIGI-TESTOR 971N™

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## Accessories

*Check with your WOLPERT agent for specified packages included with the hardness tester as standard delivery.*

*Check latest accessories update on:  
[www.wolpertgroup.com](http://www.wolpertgroup.com)*

Spring-mounted clamping attachment to hold test parts during testing

Objective 20x magnification

Objective 44x magnification

Objective 70x magnification

Objective 140x magnification (standard)

Objective 250x magnification

Indenter Rockwell diamond

Indenter Rockwell with carbide or steel ball 1/16" - 1/8" - 1/4"

Indenter Brinell with carbide ball 1 - 2,5 - 5 - 10mm

Indenter Vickers diamond

Testing table diam 80mm

Testing table diam 235mm

V-anvil 1-4mm

V-anvil 3-10mm

V-anvil 7-20mm

V-anvil 15-45mm

V-anvil 20-60mm

V-anvil 60-150mm

Table with magnetic insert

Table with anvil for point support

Table with diamond for point support

Ball-mounted testing table diameter 80mm

Vice, opening 0-80mm

XY stage manual

XY stage manual, swivelling

Blind shield (to improve visibility of optical reading)

Halogen lamp 12V, 50W

Spindle protection tube

Steel cabinet with wooden table (for correct hardness tester placement)

Device for vibration-damped erection

Dust protection cover

Thermal printer including data-cable

Printer paper rolls

Printer cable

SPC Software via RS-232

Interface cable for pc

Object micrometer with test certificate

Hardness reference blocks with

DKD / UKAS / NIST / WOLPERT WORKS certificate



Wolpert universal hardness tester Series 971 featuring motorised spindle with large testing table 400x600mm