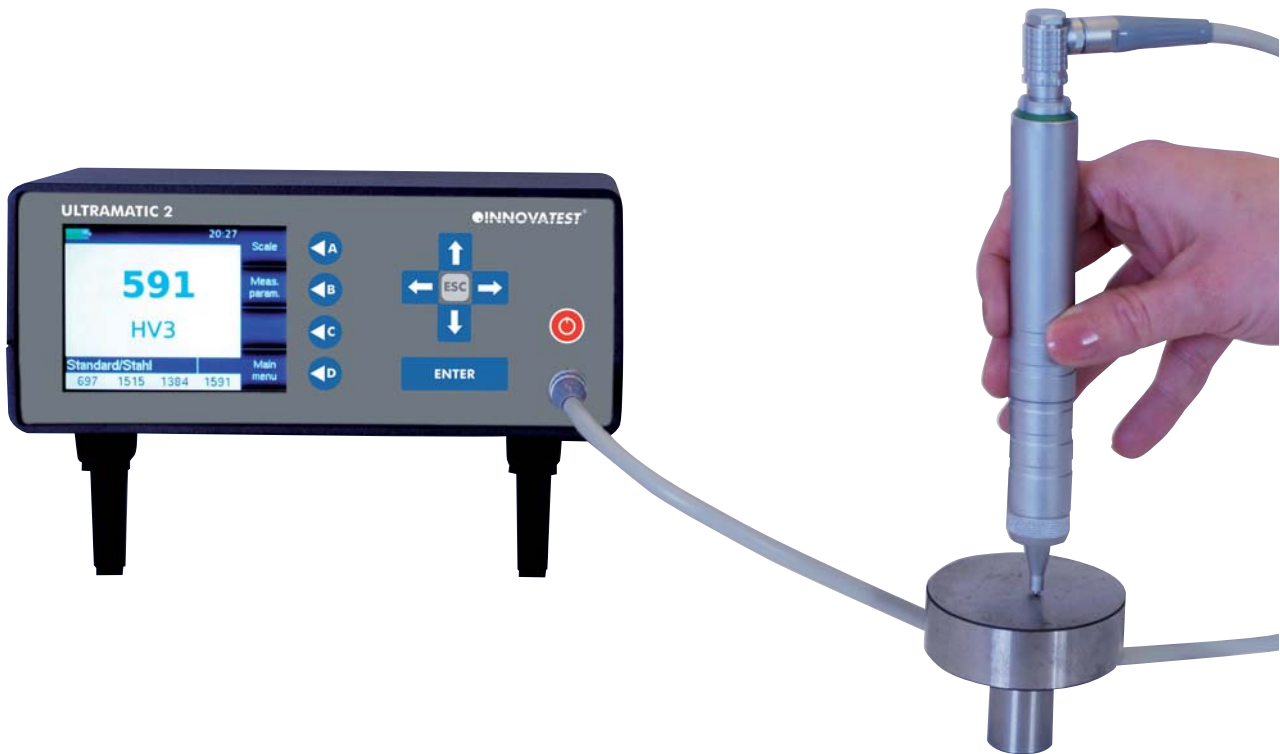


# HV400

Ultrasonic portable hardness tester "Ultramatic 2"





**ULTRAMATIC 2**  
ULTRASONIC HARDNESS TESTER

## FEATURES

The ULTRAMATIC 2 is the next generation portable and laboratory use ultrasonic hardness tester. The instrument covers several new advanced features that can be selected from a menu operated full color display.

- Ultrasonic Contact Impedance test principle, fast, accurate, easy to use in confined spaces
- Full color display with easy to operate user interface
- Suitable for hardness tests on metals and ceramics
- Direct reading in Vickers HV, and direct conversion to HRC, HRB, HB & UTS
- High reproducibility, tolerance within  $\pm 1\%$
- Extensive range of application at locations difficult to access
- Large memory, statistics and multiple data outputs
- Windows software for data transmission

## TECHNICAL SPECIFICATIONS

Measuring principle	According to the UCI method (Ultrasonic Contact Impedance Principle)		
Standards	Conforms to DIN 50159, ASTM A 1038-05 and VDI/VDE directive 2616		
Indenter	Vickers diamond (angle 136°)		
Test load	10N, 20N, 30N, 49N, 98N (different probes)		
Measuring range	Vickers	HV	10 - 3000 (direct)
	Rockwell	HRC	20 - 68 (conversion)
	Rockwell	HRB	41 - 99.5 (conversion)
	Brinell	HB	(76) - 447 (conversion)
	UTS	N/mm <sup>2</sup>	255 - 2180 (conversion)
Reproducibility	Vickers	HV	±1%
	Rockwell	HRC	±0.5
	Rockwell	HRB	±1.2
	Brinell	HB	±1%
Applicable testing materials	Preferably metals, for which HV400 can be calibrated. Examinations of ceramic(s) and glass are possible, if comparative measurements are accomplished for calibration.		
Display	Large full color graphical display 3.5" Color-LCD, 320 x 240 Pixel		
Calibration	Storage of min. 100 calibrations for different materials		
Display languages	English or German (selectable)		
Memory	500,000 readings, storage in batches with date, hour, and Go/No Go judgement		
Statistics	Mean value, minimum, maximum, standard deviation absolute and relative Delete single readings		
Interface	Serial RS-232C, USB, Host, device USB-Slave for PC connection (1 pc), USB-Master for printers (2 pcs) or USB flash drives, 100Base-TX (Ethernet), RS-232		
Printer output	Prints hardness values, hour and date Prints statistics of stored data		
Power supply	100-240V / 50-60Hz		
Batteries	NiMH battery: 4.8V/2700 mAh		
Batterie life	Approx. 7 hours		
Battery charging time	Approx. 3 hours		
Operating temperature	0°C to 50°C		
Dimensions	Device: 78mm x 198mm x 160mm (HxWxD)		
	Probe: ø19.5mm x 175mm length		
Weight	1400gr (including probe 190gr)		

## ORDER DETAILS

**HV400** Hardness tester HV400 for portable accurate testing on metals and ceramics

## STANDARD DELIVERY

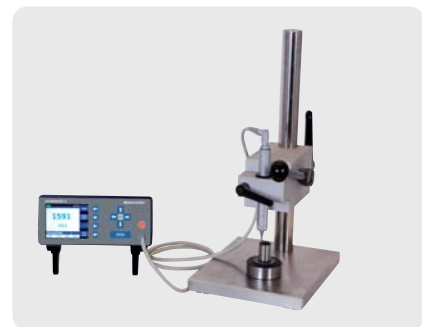
- Instrument
- Cable
- Power supply 100-240V / 50-60Hz
- Carrying case
- Manual
- INNOVATEST® certificate

## OPTIONAL PROBES

- 10N, 20N, 30N, 49N, 98N force

## OPTIONAL ACCESSORIES

- High precision stand for probe
- Probe shoes for flat surfaces
- Probe shoes for convex surfaces 10mm - 50mm
- Probe shoes for convex surfaces 50mm - 250mm
- Probe SL type (slim nose)
- Windows software program for data transmission to PC (incl. USB cable)
- Plastic handle for probe
- Carrying bag for main unit & accessories
- Mobile printer



Kapcsolat, bővebb információ:

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