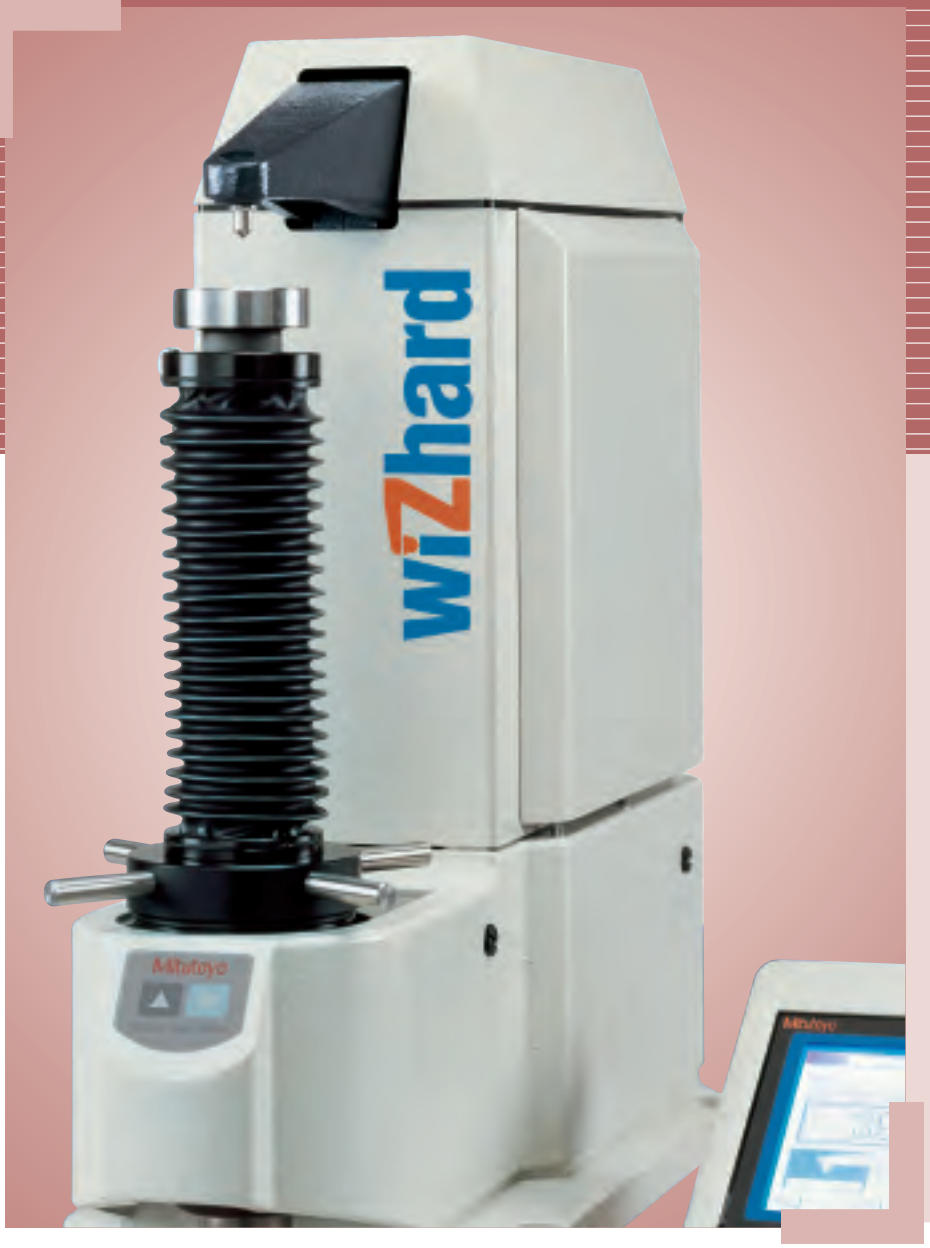
WIZHARD HR-500



Rockwell / Rockwell Superficial / Brinell hardness tester

Mitutoyo

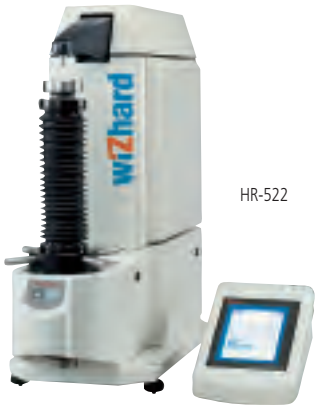
Wizhard HR-500

The Wizhard HR-500 gives you a choice of thr ee different hardness testing methods – Rockwell, Rockwell Superficial and Brinell – in a single unit. Integrated into this compact unit, in addition to counterweights, is a unique electr onic test load system. Real-time load control ensures precise, continuous test force, supported by a lar ge amount of data from various national standards. The newly designed beak-shaped extension arm considerably widens the field of application as it enables testing on parts that are difficult to access.

Features

- Varying Rockwell, Rockwell Superficial and Brinell test forces (up to 1839 N).
- Beak-shaped extension arm for improved access to internal (min. Ø40 mm / Ø22 mm*) and exter nal surfaces.
- Electronic real-time load control for precise adjustment. This avoids the possibility of applying excessive test force.
- The return action of the extension ar m for continuous testing with a fixed table position prevents instability due to table movement.
- Auto-stop elevating table with automatic application of preliminary test force.
- Compact instrument body with a large working range.
- Various data output options: RS-232C, Centr onics and Digimatic output.

*When using the diamond indenter Code No. 19BAA292



HR-522

- Touch-screen operation with background-lit LCD graphics display.
- External control panel and selection of test for ce corresponding to the selected har dness scale.
- Extremely user friendly with the choice of display language: English, German, French, Spanish, Italian or Japanese.
- Measured value compensation with cylindrical and spherical surfaces.
- Conversion to other hardness scales or tensile strength.
- Powerful statistical data processing with flexible individual data processing options and storage capacity for 1024 values.
- OK / ± Not OK tolerance monitoring.

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Rockwell / Rockwell Superficial / Brinell* hardness tester Wizhard series 810

Model	HR-521/HR-522/HR-523
Test force control	•
Data offset	•
Measured value compensation with measurement on cylindrical or spherical surfaces	•
Conversion to other hardness scales	HV, HK, HBS, tensile strength, HRA, HRB, HRC, HRD, HRF, HRG, HR15T, HR30T, HR45T, HR15N, HR30N, HR45N, HS, HB (HBS)
Statistical functions	Number of values, max., min., average value, range, upper limit, lower limit, standar d deviation, Number of OK / Not OK evaluations, histogram, X-R contr ol card (only via data output), storage and editing of 1024 values
Tolerance evaluation	•

Model		HR-521	HR-522	HR-523
Code No.		810-202-01E	810-203-01E	810-204-01E
Preliminary test force (N)		29.42; 98.07		
Test force	Rockwell (N)	588.4; 980.7; 1471		
	Rockwell Superficial (N)	147.1; 294.2; 441.3		
	Brinell* (ball Ø, mm / load, kgf)	HBW 2.5/187.5	HBW 2.5/6.25; HBW 1/10; HBW 2.5/15.625; HBW 5/25; HBW 1/30; HBW 2.5/31.25; HBW 2.5/62.5; HBW 5/62.5; HBW 10/100; HBW 5/125; HBW 2.5/187.5	
Load process		Automatic (load, dwell, unload)		
Display unit		LCD touch screen		
Test load selection		Via touch screen		
Effective dwell time		0 to 120 seconds (in 1 second incr ements)		
Maximum reach	Standard	205 mm above table, 150 mm fr om centre of indenter		
	Long**	350 mm above table, 150 mm fr om centre of indenter		
Table movement		Manual		Fully automatic
Data output		RS-232C, Digimatic, Centronics		
Power supply		230 VAC, 50/60 Hz		
Dimensions (W x D x H)		Main unit 250 x 670 x 605 mm		
Mass		Main unit approx. 60 kg		

* Indentations must be measured using a measuring microscope (not supplied with the instrument).

** Long reach models are HR-521L, HR-522L and HR-523L.

Standard equipment

Code No. 19BAA073	Diamond indenter, min. bore up to Ø40 mm
Code No. 19BAA074	Steel ball indenter Ø1/16"
Code No. 810-039	Flat table Ø64 mm
Code No. 810-040	V-Anvil Ø40 mm, aperture 30 mm, 120° - Hardness comparison plates 30-35 HRC / 60-65 HRC / 90-95 HRB / 64-69 HR30N / 74-79 HR30T - Dust cover

Optional accessories

Code No. 19BAA072	Diamond indenter, min. bore Ø40 mm inclu. MPA certificate
Code No. 19BAA292	Diamond indenter, min. bore Ø22 mm
Code No. 19BAA075	Steel ball indenter Ø1/8"
Code No. 810-037	Round table Ø180 mm
Code No. 810-038	Round table Ø250 mm
Code No. 810-041	V-anvil Ø40 mm, aperture 6 mm, 90°
Code No. 810-042	V-anvil Ø10 mm, aperture 8 mm, 120°
Code No. 810-029	V-anvil length 400 mm, aperture 50 mm, 120°
Code No. 810-030	Point anvil (diamond tip for Rockwell Superficial)
Code No. 810-043	Point anvil Ø12 mm
Code No. 810-044	Point anvil Ø5.5 mm

Optional accessories for Brinell hardness measurement

Code No. 19BAA277	Tungsten carbide ball indenter Ø1 mm
Code No. 19BAA279	Tungsten carbide ball indenter Ø2.5 mm
Code No. 19BAA280	Tungsten carbide ball indenter Ø5 mm
Code No. 19BAA284	Tungsten carbide ball indenter Ø10 mm
Code No. 19BAA281	Replacement tungsten carbide ball indenter Ø1 mm (5 units)
Code No. 19BAA283	Replacement tungsten carbide ball indenter Ø2.5 mm (5 units)
Code No. 19BAA162	Replacement tungsten carbide ball indenter Ø5 mm (1 unit)
Code No. 19BAA163	Replacement tungsten carbide ball indenter Ø10 mm (1 unit)
Code No. 19BAA318	Microscope 40X
Code No. 19BAA319	Microscope 100X

Further certified hardness comparison plates are available on request.

- Coordinate Measuring Machines
- Vision Measuring Systems
- Surface-, Form- and Contour-Measurement
- Optical Measuring
- Sensor Systems
- Hardness Measuring
- Digital Scale and DRO Systems
- Small Tool Instruments and Data Management

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