

Wizhard Rockwell, Rockwell Superficial, Brinell Hardness Testers HR-500 Series

Series 810

- Multiple test force generation for Rockwell, Rockwell Superficial and Brinell hardness.
- Dolphin-nose indenter arm for easy reach of interior (min. $\varnothing 40$ mm / $\varnothing 22$ mm, when using an optional diamond indenter) and exterior surfaces.
- Real-time electronic test force control for accurate loading. This perfectly eliminates load force overshoot.
- Indenter escape function for continuous testing at fixed table position. This eliminates instability caused by table retraction.
- Auto-stop table elevation and automatic preloading provide stable test force generation.



HR-511



HR-521



HR-523

Specifications

Preload force	29.42 N, 98.07 N
Test force	Rockwell Superficial 147.1 / 294.2 / 441.3 N Rockwell 588.4 / 980.7 / 153.2 / 245.2 / 294.2 N Brinell ⁽¹⁾ 61.29 / 98.07 / 153.2 / 245.2 / 294.2 / 306.5 / 612.9 / 980.7 / 1226 / 1839 N

(1) HR-511, HR-522 : 1839 N only

Test force setting	By control unit
Load control	Automatic (load, dwell, unload)
Load dwell time	0-120 s (1 s increments)
Max. specimen height	205 mm (for standard flat anvil)
Max. specimen depth	150 mm (from the centre of the indenter shaft)
Internal diameter	Minimal bore diameter : 35 mm (22 mm with a special indenter)
Measurement	
Conversion to other hardness scales ⁽²⁾	HV, HK, HRA, HRB, HRC, HRD, HRF, HRG, HR15T, HR30T, HR45T, HR15N, HR30N, HR45N, HS, HB, HBS, tensile strength
Statistical functions	All models : Number of values, Max., Min., Average value, Range, Upper and lower limit, Standard deviation, Number of GO/NG evaluations, Storage of 1024 values, OFFSET, Hardness value, Test condition, Continuous measurement. HR-521/2/3 : X-R control card, Editing of 1024 values, Hardness conversion value, Statistical results, Cylindrical, spherical and multipoint correction.

(2) except HR-511

Data output	RS-232C, Digimatic code (SPC) and Centronics
Power supply	100/120/220/240V AC, 50/60Hz
Dimensions (W x D x H)	Main unit 250 x 670 x 605 mm Control unit 165 x 260 x 105 mm
Mass (main unit)	65 kg
Accessories	For a detailed list of standard and optional accessories, refer to the following page.

Model	HR-511	HR-521	HR-522	HR-523
No.	810-208D	810-202D	810-203D	810-204D
No. UK only	810-208-01E	810-202-01E	810-203-01E	810-204-01E
Control unit	Membrane switch type	Touch-screen type	Touch-screen type	Touch-screen type
Stage elevation	Manual (with automatic brake)	Manual (with automatic brake)	Manual (with automatic brake)	Power drive
Table movement	Manual	Manual	Fully automatic	Fully automatic
Tolerance evaluation		-	-	-