

Hardness Testing Machines

HR-600

SERIES 810 — CNC Rockwell Hardness Testing Machines

- A workpiece that cannot be placed on a tester due to its large size can be placed on the stage of this product and tested as-is. (Maximum loading mass 100 kg)
- The motorized stage makes automatic multi-point testing at multiple places and of multiple workpieces possible.
- Plastic hardness testing is also available in addition to Rockwell/Brinell tests on metal. Brinell and Vickers indentation hardness tests which do not require vision measurement can also be performed.
- ASTM E18 compliant
- The **HR-610A/620A** is operable with a touch panel display (some functions are operable with **AVPAK** software) and the **HR-620B** is operable with a touch panel display and **AVPAK** software.
- Automatic testing by moving in the X-, Y- and Z-axis directions for workpieces with uneven surfaces or steps is made possible by adding X-axis stage and **AVPAK** software to **HR-620B**, which is equipped with a motorized Y-axis stage as standard. Also, using **FORMEio** software makes easy communication with PLCs for automation purposes, such as control of handling devices and work cells, possible.



HR-610A
(Motorized X-axis stage is available)



HR-620B
(With a motorized Y-axis stage as standard and an optional motorized X-axis stage)

SPECIFICATIONS

Model	HR-610A	HR-620A	HR-620B
Order No.	810-512-23A	810-522-23A	810-526-11A
Unit (display unit)	Rockwell/Rockwell Superficial/Brinell/Plastics hardness		
Indenter type *1	Diamond indenter and 1/16th inch carbide ball indenter		
Test force range	29.42 - 1839 N (3 - 187.5 kgf)	9.807 - 2452 N (1 - 250 kgf)	
Specimen height (Z-axis stroke)	40 - 250 mm		
Testable workpieces	Minimum surface dimensions	18 × 4 mm	
	Minimum inner diameter of pipe-type workpiece	ø400 mm	
	Concave workpiece	R25 mm or more, Height 20 mm or less	
	Minimum outside diameter	ø20 mm (See Figure 4)	
Z-axis speed	Approx. 10 mm/s		
Maximum depth (from indenter center)	220 mm		
X-axis stroke	None (Option: 160 mm or 300 mm)		
Y-axis stroke	None	160 mm (±80 mm)	
Y-axis speed	—	Approx. 50 mm/s	
Y-axis feed error	—	±0.1 mm or less	
Maximum table loading	100 kg		
Power supply	AC100 - 200 V 50/60 Hz		
Mass	176 kg	181 kg	205 kg

Hardness Testers are compliant with ASTM requirements

All HR-600 machines come with diamond indenter, 1/16" carbide ball indenter, HRC30 block, HRC 63 block, HRBW 95 block, HR30N 60 block, and HR30TW 70 block



MeasurLink ENABLED
Data Management Software by Mitutoyo



Refer to the **HR-600 Series Brochure (2295)** for more details.