HR-530 Series

SERIES 810 – Rockwell Hardness Testing Machines

- Unique electronic control makes the HR-530 series of hardness testers extremely versatile by enabling Brinell hardness testing as well as load-sequence hardness testing of plastics, plus Rockwell and Rockwell Superficial hardness testing.
- This series can test the hardness of the inside wall of a ring, a test that is only possible using ordinary hardness testers by cutting the ring into pieces. (All models.)
- The touch-panel display unit can be mounted on top of the tester, providing significant convenience if the machine installation space is restricted. (All models.) Use the optional display mounting bracket to mount the unit.
- This series allows numeric display of statistical analysis results such as maximum and minimum values, mean value and graphic display of X-R control charts and histograms required for hardness evaluation.

MeasurLink® ENABLED Data Management Software by Mitutoyo



810-336

Specifications

Model		HR-530	HR-530L	
Code No.		810-236	810-336	
Preload test force		3, 10 kgf		
Test force	Rockwell Superficial	15, 30, 45 kgf		
	Rockwell	60, 100, 150 kgf		
	Brinell	6.25, 10, 15.625, 25, 30, 31.25, 62.5, 100, 125, 187.5 kgf		
Conversions to other hardness		HV, HK, HR (Rockwell hardness A, B, C, D, F, G/Rockwell Superficial 15T, 30T, 45T, 15N,		
scales		30N, 45N), HS, HB, tensile strength		
Functions		GO/±NG judgement, serial test (for specimen of the same thickness), cylindrical correction, spherical correction, OFFSET correction, multipoint correction, statistical calculation (maximum value, minimum value, mean value, standard deviation, upper limit, lower limit, GO count, range, NG count, graph generation (X-R control chart)		
Test force setting		By control unit		
Stage elevation		Automatic (braking and load sequence)		
Control unit		Touch-screen type		
Dimensions (W x D x H)		250x667x621 mm	300 x 667 x 766 mm	
Mass		Approx. 60 kg	Approx. 69 kg	

Technical Data

Load control:	Automatic (load, dwell, unload)
Load dwell time:	0 - 120 s (1 s increments)
Max. specimen height	
HR-530:	250 mm (for standard flat anvil)
HR-530L:	395 mm (for standard flat anvil)
Max. specimen depth:	150 mm (from the centre of indenter
	shaft)
Data output:	RS-232C, Digimatic, USB2.0
Power supply:	240VAC ±10%, 50/60Hz
Control unit	
Dimensions:	191 x 147 x 171 mm
Mass:	Approx. 1.1 kg

Optional Accessories

Code No.	Description	
264-505E	DP-1VA LOGGER Digimatic Mini-Processor	
810-029	V-anvil (400 mm long, 120° groove 50 mm wide, ø50 - ø100 mm)	
810-030	Spot anvil (diamond tipped type for Rockwell Superficial, ø3.5 mm)	
810-037	Round table (ø180 mm)	
810-038	Round table (ø250 mm)	
810-039	Flat anvil (ø64 mm)	
810-040	V-anvil (ø40 mm, 120° groove 30 mm wide, ø15 - ø60 mm)	
810-041	V-anvil (ø40 mm, 90° groove 6 mm wide, ø3 - ø9 mm)	
810-042	V-anvil (ø10 mm, 120° groove 8 mm wide, ø4 - ø16 mm)	
810-043	Spot anvil (ø12 mm)	
810-044	Spot anvil (ø5.5 mm)	
11AAC237	EXPAK-07 data processing program	

For Hardness Test Blocks refer to page M-10 for details. For Indenters refer to page M-10 for details.



Excellent capability for testing difficult specimens The nose-type indenter mechanism enables measurement of surfaces inside pipes and grooves.



