

Hardness Testing Machines

Start quality control from the material — Mitutoyo's hardness testing machines can handle it

HARDMATIC HH-411 SERIES 810 — Rebound Type Portable Hardness Tester

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo



- Excellent operability that performs hardness tests with the touch of a key and a compact body allows users to measure hardness in the field. This instrument is best suited for on-site hardness tests such as large molds, railroad track, and welded spots in structures.

SPECIFICATIONS

Order No.	810-299-10, 810-299-11, 810-298-10, 810-298-11
Model	HH-411
Detector	Impact hammer with integrated detector and carbide-ball tip (D type: conforming to ASTM A 956)
Display unit	7-segment LCD
Hardness display range	Leeb hardness: 1 to 999 HL
Display range (This display range varies depending on the conversion table used.)	Vickers hardness: 43 to 950 HV Brinell hardness: 20 to 894 HB Rockwell hardness (C scale): 19.3 to 68.2 HRC Rockwell hardness (B scale): 13.5 to 101.7 HRB Shore hardness: 13.2 to 99.3 HS Tensile strength: 499 to 1996 MPa
Power supply	Alkaline AA battery 2 pcs or optional AC adapter (battery life: 70 hours)
External dimensions/Mass	Detector: ø28x175 mm in length, 120 g Display: 70(W)x110(D)x35(H) mm, Approx. 100 g

Note: Order No. **810-298-10/810-299-10** includes two AA alkaline batteries and Order No. **810-298-11/810-299-11** excludes these batteries.

HARDMATIC HH-300 SERIES 811 — Durometers for Sponge, Rubber, and Plastics

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- Hardness measurement by durometer is simply performed by holding the instrument against the surface of a specimen and reading the indicated value. This type of hardness tester is most widely used for hardness testing of sponge, rubber, plastics and other soft materials.

SPECIFICATIONS

Order No.	811-329-10	811-330-10	811-331-10	811-332-10	811-333-10	811-334-10	811-335-10	811-336-10	811-337-10	811-338-10
Model No.	HH-329*1	HH-330	HH-331*1	HH-332	HH-333*1	HH-334	HH-335*1	HH-336	HH-337*1	HH-338
Type	Compact		Long				Compact			
Display specification	Analog	Digital	Analog	Digital	Analog	Digital	Analog	Digital	Analog	Digital
Measurement target	Soft rubber, sponge, felt, hard film, winder		General rubber, soft plastic		hard rubber, hard plastic, ebonite		General rubber, soft plastic		hard rubber, hard plastic, ebonite	
Classification by specification	Type E		Type A		Type D		Type A		Type D	
Needle shape	Shaft diameter		ø1.25 mm							
	Tip shape		Circular truncated cone		Cone		Circular truncated cone		Cone	
	Tip angle		35°		30°		35°		30°	
	Tip diameter		ø0.79 mm		—		ø0.79 mm		—	
	Tip curvature		—		0.1 mm		—		0.1 mm	
Power supply	—	Button silver oxide battery SR44	—	Button silver oxide battery SR44	—	Button silver oxide battery SR44	—	Button silver oxide battery SR44	—	Button silver oxide battery SR44
External dimensions (WxDxH)	68x34x146 mm	59x40x147 mm	Analog, long type : 68x35x188 mm Digital, compact type: 59x41x1907 mm				Analog, long type : 68x34x146 mm Digital, compact type: 59x40x147 mm			
Mass	300 g	290 g	320 g	310 g	320 g	310 g	300 g	290 g	300 g	290 g

* Cannot be connected to the measurement data network system MeasurLink.

Optional Accessories for Dual-purpose Stand CTS Series

Order No.	811-019	811-012	811-013
Model	CTS-101	CTS-102	CTS-103
Applicable model	HH-331, 332	HH-333, 334, 337, 338	HH-335, 336

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Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink (refer to page A-5 for details).



An inspection certificate is supplied as standard. Refer to page X for details.



Refer to the Hardness Testing Machines Catalog (No. E17001) for more details.

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