# Mitutoyo

## Rockwell hardness testing machine HR-210MR

Item number: 810-191-11



#### Description

These are four economical Rockwell hardness testing machines to suit practically every application you need.

- The Rockwell HR-200/300/400 offers you the following benefits:
- The newly designed frame provides maximum clearance for positioning the work piece, all you need is a flat table for mounting these testing machines.
- They are very simple to operate: the analogue type HR-210 uses an automatic presetting dial gauge.
- Digital models HR-430MR/MS use automatic steering wheel braking and load sequencing for easy handling.
- Digital models HR-320MS and HR-430MR/MS can use our Digimatic Mini-processor (DP-1VR) for printing results, and you can use an input tool (USB-ITN-E) to connect to a PC for data transfer, analysis and storage.
- You can perform Brinell hardness tests by using the following optional accessories: a Brinell indenter, a weight set and a measurement microscope.

#### Features

Model:	HR-210MR
HR unit resolution:	0,5 HR
Jominy-test capability:	Additional accessories required
Workpiece clamping device K543817	Serial
capability:	
Anvil adaption:	Ø 19mm
Max. specimen height:	180 mm
Throat depth:	165 mm
Max. specimen weight:	20 kg
Approx. mass main unit:	47 kg
Height:	Max. 180 mm (100 if cover is attached) mm
Measuring depth:	Max. 165 mm (from the center of the
	indenter axis)
Functions:	To observe the hardness number within 0,2
	HR of the scale unit, as required by ISO 6508- 2, the displayed result is to be judged by the
	dial hand width within the step of the dial
	gage scale.
Standard:	JIS B 7726, ISO 6508-2
Preliminary test force (N):	98,07
Test force Rockwell (N):	588,4; 980,7; 1471
Rockwell Scale Diamond:	HRA; HRD; HRC
Rockwell Scale Ball 1,5875 mm:	HRFW; HRBW; HRGW
Rockwell Scale Ball 3,175 mm:	HRHW; HREW; HRKW
Rockwell Scale Ball 6,35 mm:	HRLW; HRMW; HRPW
Rockwell Scale Ball 12,7 mm:	HRRW; HRSW; HRVW
Description:	The HR-210MR is an economical Rockwell
	hardness testing machine to suit practically
	every application you need. The MR indicates the Rockwell testforce range.
	It offers you the following benefits:

Resolution:	<ul> <li>The frame was designed with great care to provide maximum clearance for positioning the work piece. All you need is a flat table for mounting these testing machines.</li> <li>Its outstanding robustness makes it perfect for even the roughest environments.</li> <li>You can attach the clamping device K543817 to for safe operation with hard to handle workpieces.</li> <li>The analogue type HR-210MR uses an automatic presetting dial gauge which makes it easy to operate.</li> <li>You can perform Brinell hardness tests, as indicated, by using the following optional accessories: a Brinell indenter and a measurement microscope.</li> <li>0,5 HR graduation</li> </ul>
Test force selection:	Manual weight exchange
Test force application:	Semi-automatic
Test force duration:	Fixed 3-5-5 sec. or manual
Display Unit:	Analogue dial indicator
Main unit dimensions:	214x512x780mm
Brinell Scales indentation only Ball 1,0 mm:	HBW 1/10; HBW 1/30 - (non standard due to application of preliminary test force)
Brinell Scales indentation only Ball 10,0 mm:	HBW 10/100 - (non standard due to application of preliminary test force)
Standard accessories:	810-039 Flat anvil Ø64mm 810-040 V-anvil outside diameter Ø40mm groove width 30mm 11AAB941 Water level 383876 Vinyl cover 357651 AC adaptor
	Indenters, reference materials and power cord not included

### Accessories

Optional accessories:	«         1         2         >         »
Photo Not Available	Fine feed adjustment stage for Jominy test(end quench test)specimen 810-026 Suggested retail price: 3,390.00 €*
	Hardness testing machines Adjustable support for long workpieces 810-027 Suggested retail price: 2,391.00 €*
	Hardness testing machines Height adjustable jack rest 810-028 Suggested retail price: 2,391.00 €*
	V-anvil groove length 400mm, Ø 50mm- Ø 100mm 810-029 Suggested retail price: 1,965.00 €*
	Diamond spot anvil for Rockwell Superficial scales Ø3.5 mm 810-030 Suggested retail price: 2,186.00 €*

	Round table Ø 180 mm 810-037 Suggested retail price: 652.00 €*
	Round table Ø250 mm 810-038 Suggested retail price: 1,193.00 €*
	V-anvil groove length 40 mm, Ø15 mm- Ø60 mm 810-040 Suggested retail price: 216.00 €*
P	V-anvil groove length 40 mm, Ø3 mm- Ø9 mm 810-041 Suggested retail price: 216.00 €*
Stepped V-anvil, step height 13 mm groove length 10 mm, Ø4mm- Ø16 mm 810-042 Suggested retail price: 176.00 €*	