

250 MRS  
MRS PC



3332 MRS



3332 MRSA  
3302



**ACTION**

Just push the start button and the head moves down performing the hardness test cycle in automatic succession without breaching a phase:  
**1** - Automatic contact with the specimen. **2** - Automatic clamping and activation of the reference surface point. **3** - Automatic preloading and loading.  
**4** - Automatic measure. **5** - Automatic return stroke at programmed distance. The entire test cycle is complete and the result appears on a large display.

**FORCE RANGE**

Preload:	29.42 - 98.07N (3 - 10 kgf)
Rockwell:	588.4 - 980.7 - 1471 N (60 - 100 - 150 kgf)
Superficial Rockwell:	147.1 - 294.2 - 441.3 N (15 - 30 - 45 kgf)
Brinell:	9.807 - 49.03 - 61.29 - 98.07 - 153.2 - 245.2 - 294.2 - 306.5 - 612.9 - 1226 - 1839 N (as option 2452 N) (1 - 5 - 6.25 - 10 - 15.6 - 25 - 30 - 31.2 - 62.5 - 125 - 187.5 kgf - as option 250 kgf)
Vickers/Knoop:	9.807 - 29.42 - 49.03 - 98.07 - 147.1 - 196 - 294.2 - 490.35 - 980.7 N (1 - 3 - 5 - 10 - 15 - 20 - 30 - 50 - 100 kgf)
Optional tests:	49 - 132 - 358 - 961 N (for plastic and rubber as per EN-ISO 2039)

**FEASIBLE TESTS**

Rockwell:	HRA - HRB - HRC - HRD - HRE - HRF - HRG - HRH - HRK - HRL - HRM - HRP - HRR - HRS - HRV
Superficial Rockwell:	HR15N - HR30N - HR45N - HR15T - HR30T - HR45T - HR15S - HR30S - HR45S - HR15W - HR30W - HR45W - HR15X - HR30X - HR45X - HR15Y - HR30Y - HR45Y
Brinell HBWT:	1/30 - 2.5/15.6 - 2.5/31.5 - 5/125(3) (Aluminum and its alloys) - 2.5/62.5(2) (Aluminum and its alloys) - 2.5/187.5(6) (Aluminum and its alloys) - 2.5/187.5(5) (Carbon steel) - 2.5/187.5(1) (Cast iron)
Vickers/Knoop:	Generate indentation
Temperature:	Measure test temperature range from - 40.0 to + 80.0 °C

**OPTIONAL TESTS**

Brinell HBW:	HB1/10 - HB1/30 - HB2.5/6.25 - HB2.5/15.625 - HB2.5/31.25 - HB2.5/62.5 - HB2.5/187.5 - HB5/25 - HB5/125 - HB5/250
Vickers/Knoop:	HV1 - HV3 - HV5 - HV10 - HV15 - HV20 - HV30 - HV60 - HV100
Shore:	ISO 2039, Shore A and D hardness scales for plastic
CHD:	Automatic Case depth measure with non-destructive process HDT method tracing case depth curve. Range till 1.5 mm / 0.06"

**TECHNICAL DATA**

Conformity Standards:	EN-ISO 6506-2 / EN-ISO 6507-2 / EN-ISO 6508-2 / EN-ISO 2039 / ISO 868 / ASTM-E10 / ASTM-E18 / ASTM-E103 / ASTM 2240 / ASTM-E384 / JIS
Load accuracy:	Better than 0.1 % - MRS PC Better than 0.05 %
Readout Division:	0.1 HR / HBWT - MRS PC 0.01 HR
Indenter Stroke:	250MRS, 3332MRS and 3302MRSA: Motorized 50mm / 2"
Height Capacity:	250MRS: 215 mm / 8.5" (As option 300 mm / 12") - 3332MRS: 380 mm / 15" - 3332MRSA: Motorized 500 mm / 19.5" (As option up to 700 mm / 27.5")
Depth Capacity:	250MRS: 190 mm / 7.5" (As option 220 mm / 8.5") - 3332MRS and 3332MRSA: 200 mm / 8"
Working table:	3332MRS, 3332MRSA and 3302MRSA: 390 x 330 mm / 15 x 13" (More on request)
Tolerable Weight:	2000kg
Temperature Range:	From 10 °C to 35 °C
Data Output:	RS 232 C (USB as option)
Power Supply:	110 or 220 V / 50÷60 Hz
Software:	Affri - OMAG
Principle of Operation:	Load Cell and Closed Loop (Affri patent)
Fields Of Use	For all metals: iron, steel, tempered steel, cast iron, brass, aluminum, copper and metal alloys. Heat treatment, hardening, nitriding, cementation and hardfacing. Hard and soft plastics.
Packing:	60 x 100 x h50 cm / 23 x 40 x h20" - 85kg