

Warranty

24 Months

Included



Included



Included



Included



Included



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Technical Highlights:

- Measures **all metal** samples (mass > 3kg, thickness > 8 mm)
- **Rebound** hardness tester
- **Impact type D** (standard) external, included
- **Accuracy: 1 %** at 800 HLD
- **Indicates:** Rockwell (B & C), Vickers (HV), Brinell (HB), Shore (HS), Leeb (HL) and **Tensile strength** (MPa)
- Tests at **any angle** (360°)
- ① **Metal housing**
- **Standard Battery** operated
- **Optional Sensors** available



Automatic recognition of the impact sensor connected to the HMR

High / low limits
Programmable set points for go / no-go testing. Sound signal output



Data Output to PC
USB Output included to print – the Internal memory

Software and cable to PC included

Measurement direction: all directions possible by an automatic compensation

Delivered in a **hard carrying case**

Other optional sensors:

Impact DC-Typ
AHMR DC: € 540,-
Short impact sensor for narrow spaces for tests in holes or hollowed objects



Impact D+15-Typ
AHMR D+15: € 540,-
Slim front section for holes, grooves or re-entrant surfaces



Impact DL-Typ
AHMR DL: € 1330,-
For very narrow surfaces (ø 4.5 mm), e.g. slender or narrow grooves



Impact G-Typ
AHMR G: € 1 330,-
900 % impact energy compared to type D for big and heavy test objects with rough surfaces



Impact C-Typ
AHMR C: € 540,-
25 % impact energy compared to type D for testing tiny or light objects or the surface of hardened layer



Mobility: The SAUTER HMR provides a professional measurement solution out in the production, in the work-shop or the incoming control

Automatic unit conversion The SAUTER HMR converts the measured results into all above mentioned popular **hardness units** and into **tensile strength** (σ_b MPa)

Statistics kit: Shows single measured value, average value, testing date, impact direction, impact time, etc.

Internal memory for 500 groups (with up to 32 values forming the average value of the group)

Measuring ranges hardness::

HL with D Sensor (HLD): Min: 170 to Max: 960 HLD

Material		Impact sensor											
		D/DC		D+15		C		G		E		DL	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Steel and cast steel	HRC	20,0	68,5	19,3	67,9	20,0	69,5			22,4	70,7	20,6	68,2
	HRB	38,4	99,6					47,7	99,9			37,0	99,9
	HRA	59,1	85,8							61,7	88,0		
	HB	127,0	651,0	80,0	638,0	80,0	683,0	90,0	646,0	83,0	663,0	81,0	646,0
	HV	83,0	976,0	80,0	937,0	80,0	996,0			84,0	1.042,0	80,0	950,0
Cold work tool steel	HS	32,2	99,5	33,3	99,3	31,8	102,1			35,8	102,6	30,6	96,8
	HRC	20,4	67,1	19,8	68,2	10,7	68,2			22,6	70,2		
Stainless steel	HV	80,0	898,0	80,0	935,0	100,0	941,0			82,0	1.009,0		
	HRB	46,5	101,7										
Grey cast iron	HB	85,0	655,0										
	HV	85,0	802,0										
	HRC	93,0	334,0					92,0	326,0				
Nodular cast iron	HB	131,0	387,0					127,0	364,0				
	HV												
	HRC												
Cast aluminium alloys	HB	19,0	164,0			23,0	210,0	32,0	168,0				
	HRB	23,8	84,6			22,7	85,0	23,8	85,5				
Brass (Copper-zinc alloys)	HB	40,0	173,0										
	HRB	13,5	95,3										
Bronze (Copper-aluminium-tin alloys)	HB	60,0	290,0										
Wrought copper alloys	HB	45,0	315,0										

Zugfestigkeit Messbereich: σ_b von 374 bis 2652 MPa (in Stahl)

Standard block for calibration included

Technical data:

- Min. sample weight
Sensor D + andere: 3 kg
Sensor C: 1,5 kg
Sensor G: 15 kg
on a massive support
- Min. sample thickness (mm):
Sensor G: 10 mm
Sensor C: 1 mm
Sensor D + others: 8 mm

- **Min. sample radius** (concave / convex): 50 mm (with support ring: 10 mm)

Size: L 132 x B 76 x H 32 mm; **Weight:** 345 g

Supports rings for bended testing samples available – please enquire.

Power supply 2 x 1.5V AA Batteries, Operation time **50 h**

Power Management

- Auto-Power-Off function
- Low-Battery indicator

Modell	Sensor	Resolution	Price, excl. VAT	ISO Calibration Certificate
HMR	— Typ D	— 1 HL	€ 1 990,-	€ 120,-