

Warranty

**24**  
Months

Included



Included



Included



Included



Included



optional



**Technical Highlights:**

- Measures **all metal** samples (mass > 3kg, thickness > 8 mm)
- **Rebound** hardness tester
- ② **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°)
- Standard battery operated
- **Optional Sensors** available



**Automatic recognition** of the **impact sensor** connected to the HMP

**Data Output to PC**  
RS 232C Output included, to print the internal memory



**Software and cable to PC** included

**Measurement direction:** all directions possible with automatic compensation

**Printer**  
Optional: Thermo Mini printer ATU-05:

Delivered in a **hard carrying case**

Impact DC-Type  
**AHMR DC:**  
Short impact sensor to allow testing in narrow spaces or in holes or hollow objects



Impact D+15-Type  
**AHMR D+15:**  
Slim front section for holes, grooves or re-entrant surfaces



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



Impact G-Type  
**AHMR G:**  
900 % impact energy compared to type D for big and heavy test objects with rough surfaces



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



**Mobility:**

The SAUTER HMM provides a professional and resilient measurement solution wherever required, i.e. production, product control, etc

**Automatic unit conversion:**

The SAUTER HMP converts the measured results into all above mentioned popular **hardness units** and into **tensile strength** ( $\sigma_b$  MPa)

**Statistics kit:**

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

**Internal memory for 100 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				
	HRC												
	HV												
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										

Measuring range tensile strength:  $\sigma_b$  from 374 to 2652 MPa (steel only)

Standard block for calibration included

**Technical data:**

- Min. sample weight  
Sensor D + others: 3 kg  
Sensor C: 1,5 kg  
Sensor G: 15 kg

on a solide and stable 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: W 150 x D 74 x H 32 mm; Weight: 245 g

Supports rings for bended testing samples available – please enquire.

Power supply 2 x 1.5V AA batteries, Operation time: **100 h**

**Power Management**

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

Model	Sensor	Resolution	Price, excl. VAT	ISO Calibration Certificate
HMP	Typ D	1 HL		