

251 VRS



Optional PC combined with camera and software for quick Vickers and Brinell for semi-auto or auto measurements



270 VRS 770



Sliding table and large V face anvil



Clamping base for big or unstable pieces

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 - 98.07 N (3 - 10 kgf)
Rockwell/Superficial R:	588.4 - 980.7 - 1471 N (60 - 100 - 150 kgf) / 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 - 19.60 - 29.42 - 49.03 - 98.07 - 147.1 - 196 - 294.2 - 490.35 - 980.7 N (1 - 2 - 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 HBW:	HBW1/1 - HBW1/2.5 - HBW1/5 - HBW1/10 - HBW1/30 - HBW2.5/6.25 - HBW2.5/15.625 - HBW2.5/31.25 - HBW2.5/62.5 - HBW2.5/187.5 - HBW5/25 - HRW5/62.5 - HBW5/125 - HBW10/100 (As option HB5/250 - HB10/250)
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) - (As option HB5/250)
Vickers/Knoop:	HV1 - HV3 - HV5 - HV10 - HV15 - HV20 - HV30 - HV60 - HV100 / HK1 - HK2
Temperature:	Measure test temperature range from - 40,0 to + 80,0 °C
Shore (Optional):	ISO 2039, Shore A and D hardness scales for plastic
CHD (Optional):	Automatic CHD with multi-indentation. Automatic Case depth measure with non-destructive process (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 0,5 %
Readout Division:	VRSD: 0.1 HR / HB / HV - VRSTV: 0.1 HB / HV - 0.01 HR
Indenter Stroke:	Motorized 50mm / 2"
Height Capacity:	251VRS: 215 mm / 8,5" - 270VRS: 380 mm / 15" - 770VRS: 700 mm / 27,5"
Depth Capacity:	190 mm / 7,5"
Working table:	270/770VRS: 390 x 330 mm / 15 x 13" (More on request)
Tolerable Weight:	2000kg
Objectives:	75X (Optional: 150X - 225X - 300X)
Reading:	VRSTV: Automatic and semi-automatic through CCD camera and software (Computer as optional) VRSD: Semi-automatic with encoder VRSA: Semi-automatic with drum scale
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 - DMAG
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:	251VRS: 50x60x100cm / 20x23x40" - 85kg, 270VRS: 80x80x150cm / 32x32x59" - 120kg, 770VRS: 120x120x160 mm / 47x47x63" - 145kg.