## RSDMAG

## FROM PORTABLE .....



- The first real standardized portable hardness tester conform to the Rockwell and Brinell standards ASTM E-18, ASMT E-10 and ISO 6508, ISO 6506
- Achieves the highest level of measurement of depth accuracy and resolution available for a Hardness test
- Constant high repeatability and accuracy in every test condition
- RSD MAG is equipped with an advanced calibrated load cell static system for multi load force
- The AFFRI RSD MAG has no limits on samples geometry and largeness
- It is completely uninfluenced by direction so that it is operative up to 360° positioning and is not affected by any external source of vibration
- Self-aligning on round and flat surfaces
- Secure stability on every test piece
- LCD graphic display for multi scale vision, simultaneous conversion on many scales, tolerance setting, statistic, temperature measure, depth indentation thickness, complete statistic, histogram, memory data
- RS 232 C Output for printer (as option USB 2 is available)
- Are available indenters of various length to test every test area and different clamping system





Pulling one single start lever the result will appear in few seconds. It can be used by any operator without any particular preparation:







- 1 Identify the test area and place the hardness tester on the test sample
- 2 Locking the magnetic lever the tester will strongly adhere to the test piece and remain clamped for the entire test cycle
- 4 Sliding 50 mm the indenter take contact with different surfaces or misaligned surfaces
- 3 Start the test and in 4 seconds the result will appear on the display scale or deal gauge



## ..... TO BENCH-TOP



Easy and safe measurements on samples with difficult geometry



50 mm vertical stroke for measuring head and indenter

Combine the RSD MAG tester with two different size of stand support in order to have a regular bench top tester based on your needs.

	670H	460L
Height Capacity:	390 mm	180 mm
Depth Capacity:	232 mm	204 mm



#### 670H / 460L



Stand support for magnet 670H High stand / stroke 390 mm 460L Regular stand / stroke 180 mm

#### 206RSD / 330RSD



Stand support for RSDMAG head 206RSD Elevating scew / stroke 215 mm 330RSD Big base / stroke 300 mm

#### 903RSD / 331RSD



Stand support for RSDMAG head 903RSD Big base / stroke 700mm 330RSD Base for rings / stroke 700 mm

## RSDMAG D2 - 588.4 to 1471 N

(60 to 187.5 kgf)

RSDMAG D4 - 147,1 to 441,3 N (15 to 45 kaf)

Combine the RSDMAG head with the base that better fit with the shape's geometry of your test sample.



#### SMX30



300mm / 11.8" magnetic base for HR/HB measures up to 20mm / 0.8" sample's thickness

#### SMX50



500mm / 19.7" magnetic base for HR/HB measures less than 20mm / 0.8" sample's thickness

### SMX55



Magnetic base with 10mm / 0.4" horizontal stroke sliding head for multi indentation

#### SMX70



Double magnetic clamping base for big or small diameters round shape samples

SMX80



Chain clamping base for non ferrous samples

#### RSDMAG D2/30 - D4/30





#### RSDMAG D2/55 - D4/55



RSDMAG D2/70 - D4/70

### RSDMAG D2/80 - D4/80





# FORCE RANGE

### **RSDMAG D4**

Preload:	29.42 N (3 kgf)
Rockwell:	
Superficial Rockwell:	147.1 - 294.2 - 441.3 N (15 - 30 - 45 kgf)
Brinell:	153.2 - 294.2 - 306.5 N (15.625 - 30 - 31.25 kgf)
Vickers/Knoop:	29.42 - 147.1 - 294.2 N (3 - 15 - 30 kgf)

98.07N (10 kgf)
588.4 - 980.7 - 1471 N (60 - 100 - 150 kgf)
98.07 - 612.9 - 1226 - 1839 N - as option 2452 N (10 - 62.5 - 125 - 187.5 kgf - as option 250 kgf)
98.07 - 588.4 - 980.7 N (10 - 60 - 100 kgf)

**RSDMAG D2** 

**FEASIBLE TESTS RSDMAG D4 RSDMAG D2** Rockwell: HRA - HRB - HRC - HRD - HRF - HRG - HRL - HRM - HRR HR15N - HR30N - HR45N - HR15T - HR30T - HR45T - HR15W - HR30W \_\_ Superficial Rockwell: - HR45W - HR15X - HR30X - HR45X - HR15Y - HR30Y - HR45Y 5/125(3), 2.5/62.5(2) and 2.5/187.5(6) (Aluminum and its alloys) -Brinell HBWT: 1/30 - 2.5/15.6 - 2.5/31.5 2.5/187.5(5) (Carbon steel) - 2.5/187.5(1) (Cast iron) Vickers/Knoop: Generate indentation HV3 - HV15 - HV30 Generate indentation HV10 - HV60 - HV100 Measure test temperature range from - 40.0 to + 80.0  $^{\circ}\text{C}$ Measure test temperature range from - 40.0 to + 80.0 °C Temperature:

#### TECHNICAL DATA

EN-ISO 6506-2 / EN-ISO 6507-2 / EN-ISO 6508-2 / ASTM-E10 / ASTM-E18 / ASTM-E103 / ASTM-E384 / JIS Conformity Standards:

Accuracy: Better than 0.5 % Readout Division: 0.1 HR / HBWT Indenter Stroke: 50mm / 2" Temperature Range: From 10 °C to 35 °C

Power Supply - Data Output: RS 232 C (USB as option) - Battery 6 V + Charger

Software: Affri - OMAG Principle of Operation: Dynamometric Load Cell

Tests in laboratory or in loco on tubes, profiles, valves bulky or small pieces. For all metals: iron, steel, tempered steel, cast iron, brass, aluminium, copper and Fields Of Use metal alloys with a more than 0.6 mm thickness. Heat treatment, hardening, nitriding, cementation and hardfacing with less than 0.6 mm depth (RSD MAG D4).

Packing: 50 x 40 x 60 cm / 20 x 18 x 23" - 35kg

