



MAGNETIC PORTABLE HARDNESS TESTER RS-MAG

## A standardized portable hardness tester

Unbelievable performance never seen before with the Affri Hardness Tester RS-MAG. A conventional hardness tester including conformance to any standard is available, as a portable system for onsite testing when test pieces are too large or too heavy that a bench hardness tester is not capable to accommodate it. The AFFRI magnetic portable hardness tester solves all such type of necessities. AFFRI' state of the art technology permits different tests at different load forces. The load cell inside has no impact force, while the Affri vertical movement permits a fully automatic test cycle.

It conforms to all Rockwell, Brinell, hardness standard methods. The standardized high pressure on the indenter creates depth indentations on the surface. Thus eliminating the need for special surface preparation; a simple grinding of 180 grit on a small area just where the indenter will indent.

## Follow the profile of test piece

The Affri vertical stroke system of the measuring head, 50 mm (2") follows the profile of test sample, it assures a very accurate and absolute measurement even when sample retracts during test cycle. (Original Affri Patented System)

It has been designed and studied by AFFRI engineers which create the state of the art, in hardness test systems for over 55 years experience.

The AFFRI -RS MAG is completely uninfluenced by direction so that it is operative up to 360° positioning and is not affected by any external source of vibration; It does not need to be leveled.

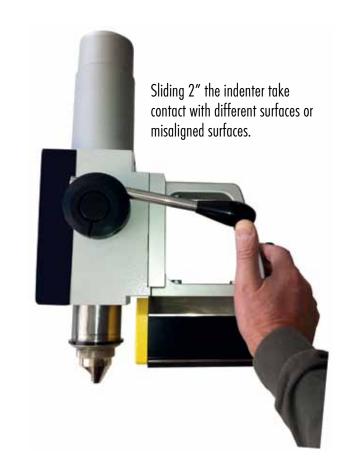
It is absolutely fantastic difficult to believe.

On digital model the internal battery assures 20 hours operation use.

The state of the art Affri system protects the indenter by accidental shock before and during test, thus increasing the life of indenter especially for diamond cone 120° Rockwell C test.



Vertical sliding indenter 50mm (2") range action assures easy test at different distance between test surface and indenter





# **Easy to operate**

It is so easy to manipulate, pull one single start lever and the measure will appear in a few seconds; there is no motor inside but at same time it's a totally automatic system. It is so simple and easy to use that there is no need for any particular preparation by the operator.

Identify the test area and place the hardness tester on the test sample, then lock the magnetic lever, the tester will strongly adhere to the test piece and remain clamped for the entire test cycle: you pull the single start lever for few seconds and the head moves down dynamically until it makes contact with test surface and generates the measure cycle. In 4 second the result will appear on the display scale or dial gauge.





TECHNICAL DATA	
Conforms to standards:	ISO 6506, ISO 6508, ASTM E-18, ASTM E-10
Test load	60 - 100 - 150 for Rockwell (187,5 for Brinell at request)
	15 - 30 - 45 for superficial
Readout	Rockwell direct readout (Brinell and Vickers for conversion)
Accuracy	conform to the relevant standards
Readout resolution	0.1 digital
Indenters	120° in diamond stone for Rockwell C, A &D
	1/16" W ball indenter for Rockwell B, F &G
	Ball 2,5 mm W for Brinell
Operative distance	from 0 to 50 mm (2") to follow the profile of sample surface
Protection indenter	standard
Clamping piece	standard
Magnetic support	standard 100 x 50 mm
Power source	6 V battery + charger
Weight of the system	25 Kg

#### **KEY DATA**

- Portable standardized hardness tester with variable test force for Rockwell-Brinell
- Test load selectable from 15 30 45 60 100 150 Kp (187,5 kg for Brinell)
- Automatic test cycle in one single operative movement including: contact with test surface from any distance 2" 50mm, automatic clamping surface, automatic preloading, automatic loading, automatic reading, automatic return to zero.
- Absolute exact measurement even if the test piece deflects or shifts down during the test cycle
- It follows the profile of test surface for 50 mm / 2" automatically during the test cycle
- Digital direct Rockwell A-B-C-D-F-G
- It is accurate in any angle positioning for 360° without need of any adjustment
- It is accurate even if there is some vibration during the test cycle

RS-MAG-D1 a single test force between 60 - 100 - 150 Kp (187,5 kg for Brinell) RS-MAG-D2 selectable test forces 60 - 100 - 150 Kp (187,5 kg at request)

a single test force between 15 - 30 - 45 Kp RS MAG-D3 RS MAG-D4 selectable test forces 15 - 30 - 45 Kp

Digital direct readout scale Rockwell and Brinell units

#### STANDARD ACCESSORIES

Magnetic clamping system Clamping piece Protective cup for indenter Lever for automatic test cycle Battery charger

### **ACCESSORIES ON REQUEST**

120° Diamond Indenter for Rockwell C, A, N 1/16" W ball indenter for Rockwell B, F, T 2,5 mm. W ball indenter for Brinell Test block HRC Test block HRB Test block HR30N

Test block HR30T

Test block HBW 2,5/187,5





OMAG di Affri D. & C. sas Via M. Tagliaferro, 8 I-21056 INDUNO OLONA - CEE - VARESE - ITALY Tel. +39 0332 200546 - Fax +39 0332-203704 E-Mail info@omagaffri.com

#### Exclusive distributor:

**AFFRI**® Via M. Tagliaferro, 8 I-21056 INDUNO OLONA - CEE - VARESE - ITALY Tel. +39 0332 201533 +39 0332 206289 Fax +39 0332 203621 E-Mail info@affri.com - www.affri.com

Nord Europe: Sales & Service AFFRI Testing Instruments BVBA Sprl NIEUWSTRAAT 28 B-3360 KORBEEK-LO

Tel + 32.16.60.66.53 Fax +32.2.759.90.73 E-Mail affri@skynet.be - www.affri.com America:

AFFRI Inc. 111 S. Lombard Rd Unit #4 ADDISON, IL 60101 - USA Tel. 224 374 0931 - 630 303 1588 E-Mail usa@affri.com - www.affri.com