

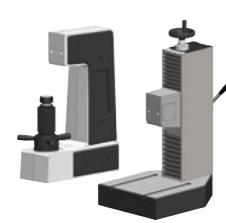
670H / 460L

206RSD / 330RSD

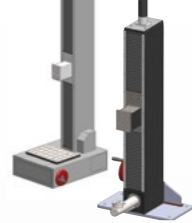
903RSD / 331RSD



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



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



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

RSDMAG D2 - From 588.4 to 1471 N  
(60 - 187.5 kgf)  
RSDMAG D4 - From 147.1 to 441.3 N  
(15 - 45 kgf)

Combine the RSDMAG head with the base that better fits the shape and geometry of your test sample.

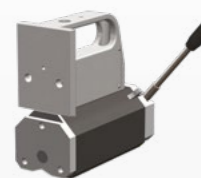


SMX30



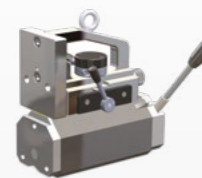
300mm / 11.8" magnetic base for HR/HB tests on samples more than 20mm / 0.8" thick

SMX50



500mm / 19.7" magnetic base for HR/HB tests on samples less than 20mm / 0.8" thick

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 shaped samples

SMX80



Chain clamping base for non ferrous samples

SMX90



Electromagnetic base with rechargeable battery.

RSDMAG D2/30 - D4/30 RSDMAG D2/50 - D4/50 RSDMAG D2/55 - D4/55 RSDMAG D2/70 - D4/70 RSDMAG D2/80 - D4/80 RSDMAG D2/90 - D4/90



FORCE RANGE

RSDMAG D4

RSDMAG D2

Table with 3 columns: Force Range, RSDMAG D4, RSDMAG D2. Rows include Preload, Rockwell, Superficial Rockwell, Brinell, and Vickers/Knoop.

FEASIBLE TESTS

RSDMAG D4

RSDMAG D2

Table with 3 columns: Feasible Tests, RSDMAG D4, RSDMAG D2. Rows include Rockwell, Superficial Rockwell, Brinell HBWT, Vickers/Knoop, and Temperature.

TECHNICAL DATA

Table with 2 columns: Technical Data, RSDMAG D4/D2. Rows include Conformity Standards, Load accuracy, Readout Division, Indenter Stroke, Temperature Range, Power Supply, Software, Principle of Operation, Fields Of Use, and Packing.

670H (Stand support for RSDMAG)

460L (Stand support for RSDMAG)

Table with 3 columns: Height Capacity, Depth Capacity, 670H, 460L.

STEELS AND CAST IRON (HS)

Large conversion table for Steels and Cast Iron (HS) showing various hardness scales (HV, HB, HRC, etc.) and their corresponding values.

HARDNESS CONVERSION TABLES FOR METALS

Table for Hardness Conversion Tables for Metals, showing scales like Rockwell, Superficial Rockwell, and Brinell.

Table for Minimum thickness measurable for Rockwell V Diam, showing F and HRC values for different diameters.

Table for Minimum thickness measurable for Brinell, showing F and HB values for different diameters.

Table for Minimum thickness measurable for Vickers V Diam, showing F and HV values for different diameters.

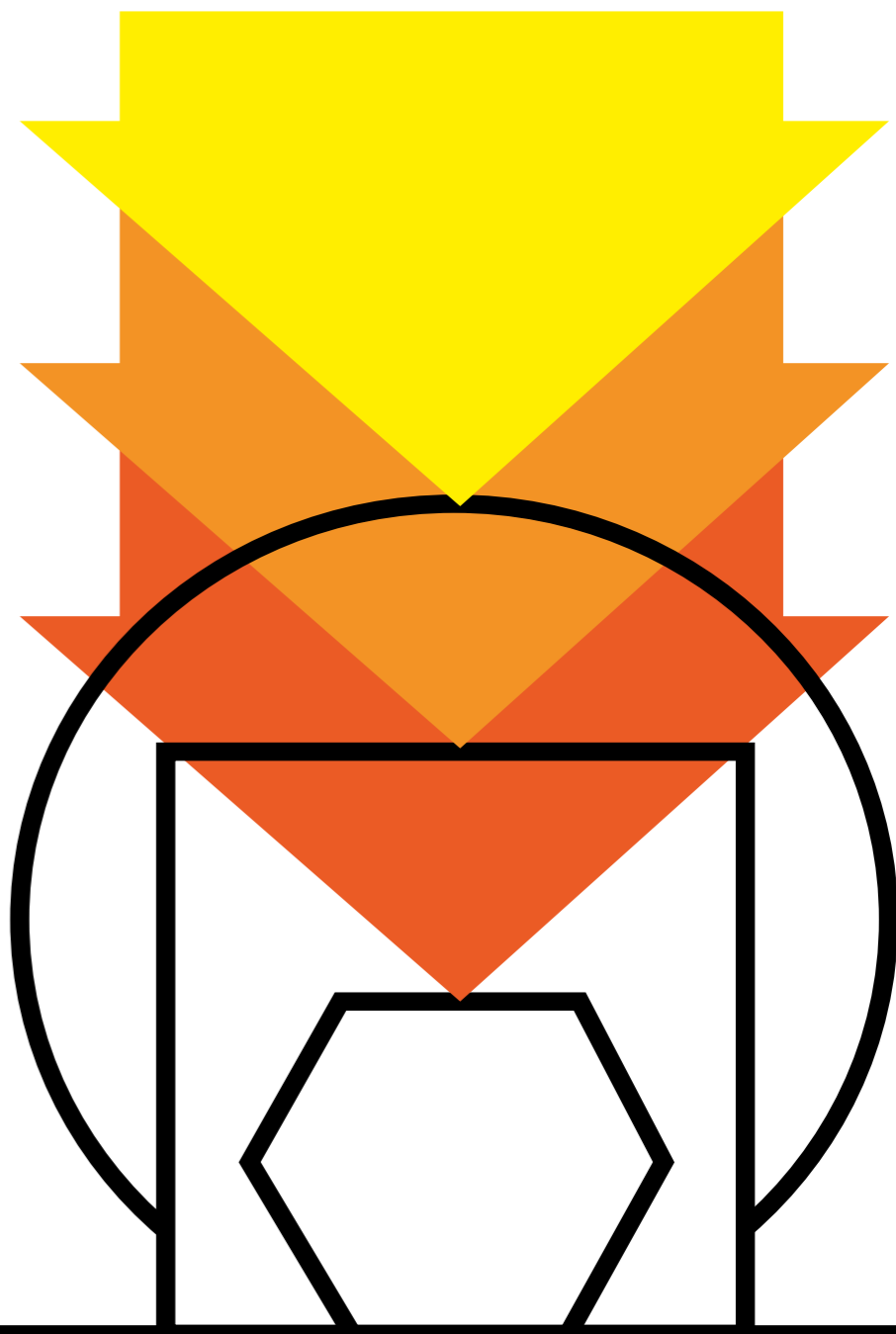
NO IRON METALS (SS)

Large conversion table for No Iron Metals (SS) showing various hardness scales (HV, HB, HRC, etc.) and their corresponding values.

All the values shown are approximate only. This chart is intended primarily as a reference guide.



RSD SOLUTIONS



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www.ndtsupply.com, sales@ndtsupply.com



# RSD ONE TESTER, MANY SOLUTIONS

Rockwell, Superficial Rockwell and Brinell  
Conform to **ASTM-ISO** standards

## RSD Bench Top

206



For very small or medium size samples

330

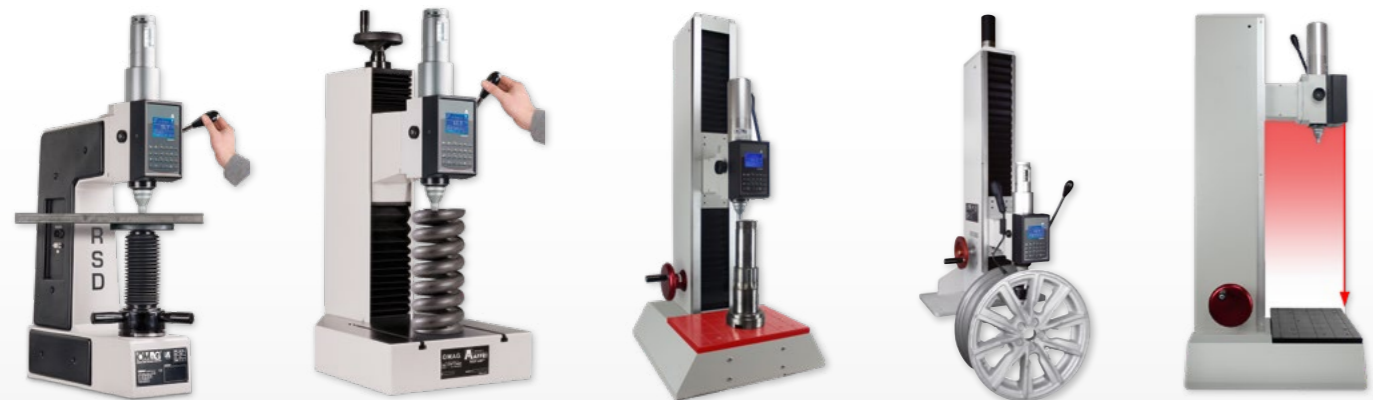


270 x 330mm (10.6 x 13") working base for bulky samples

903  
331



Height capacity of 700mm (27,5"), more on request. Optional base for rings.



- Hardness tester conform to standards **ASTM E18, ASMT E10** and **ISO 6508, ISO 6506**
- Equipped with an advanced calibrated load cell static system for multi load forces management
- The vertical head stroke of 50mm (2") assures absolute accuracy even in case of structural deflection
- Costant high repeatability and accuracy in every test condition and direction, even upside down.
- LCD display for direct double scale results, instant conversion to other hardness scales, tolerance settings, temperature measurement, indentation depth thickness, complete statistic, histogram, memory data.
- RS 232 C and USB outputs for printer.

### ROCKWELL

HRA	HRB	HRC	HRD	HRE	HRF	HRG
HRH	HRK	HL	HRM	HRP	HRR	HRS
HR15 N/T/S/W/X/Y	HR30 N/T/S/W/X/Y	HR45 N/T/S/W/X/Y				

### BRINELL HBTW

1/30	2.5/15.6	2.5/31.5	2.5/62.5	2.5/187.5	5/125
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### VICKERS (Generate indentation)

HV3	HV10	HV15	HV30	HV60	HV100
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## RSD Portable

### RSD MAG

Portable tester with magnetic clamping base. 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, even inverted. The first result is correct with no need for a second test.

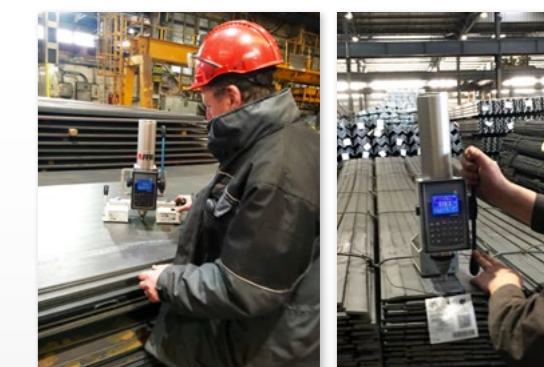


### USER FRIENDLY

Pulling one single start lever the measure will appear in few seconds. It is so simple and easy to use that there is no need for any particular preparation by the operator.

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 for the entire test cycle
3. Start the test and in few seconds the result will appear on the display

Safe clamping on any surface, from round to flat, with self alignment of the indenter with the measurement axis. Highest accuracy and repeatability at every measurement.



### AUTOMATIC HARDNESS TEST CYCLE

Just pull the start lever and the head moves down performing the automatic hardness test cycle:

1. Automatic contact with the specimen
2. Automatic clamping and activation of the reference surface point
3. Automatic preloading and loading
4. Automatic measure and automatic return stroke when releasing the lever

The entire test cycle is complete and the result appears on a large display.



### AFFRI® CLAMPING SYSTEM

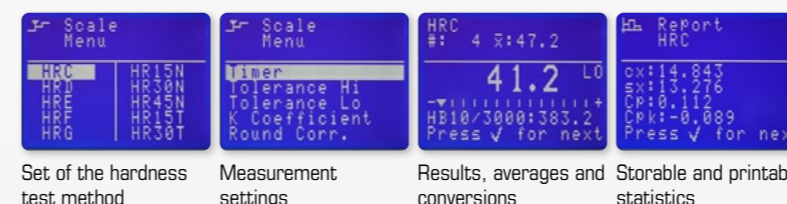
The clamping system assures perfect stability of any test piece throughout the test cycle. Secure contact with the specimen is always maintained, even in the unlikely event of any specimen movement during the operation cycle.

### ABSOLUTE BASE

A wide and stable working plate to support masses over 2000 kg (4409.2 lb), eliminate instability problems, maintenance and adjustments. For bulky test pieces which cannot be easily received by regular bench top testers.

### THE SOFTWARE

Main control LCD panel in front of the measuring head for setup of test parameters, including powerful software and electronic. Precise test settings. Dynamic results. Touch key pad board IP 64 protection.



Set of the hardness test method

Measurement settings

Results, averages and conversions

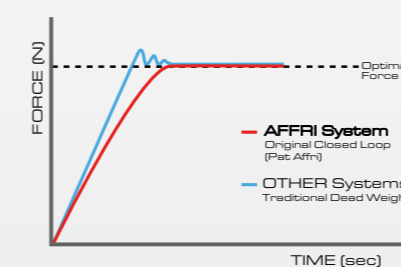
Storable and printable statistics

### LOAD CELL TECHNOLOGY

The exclusive Affri latest generation of load cells control load forces assuring perfect linearity in every range eliminating the problems associated with traditional dead weight testers.

The force by load cell assure absolute accuracy at all test conditions without any equal in the world. Results are not affected by any structural deflection, misalignment or vibration. The system can also operate in an inclined position.

The R & R. data is at the top of its class and not surpassed by any other competitor under the same test conditions.



### FROM PORTABLE TO BENCH-TOP

Combine the RSD MAG tester with two different size of stand support, 670H or 460L, in order to have a regular bench-top tester.

This system fully conforms to hardness testing standards and allows testing in laboratory on small pieces and prepared samples without the need of buying another hardness tester.



Hardness measurements will result fast and easy as an AFFRI bench tester including the sample clamping system and the deflection auto-compensation system.