AFFRI Metaltest Mk 11

Complies with : ASTM B-724, ASTM 2240 91, DIN 53505

The **Affri Metaltest** is a portable Rockwell Hardness tester with direct digital read-out. It is designed for hardness tests on particularly cumbersome items, materials in the warehouse, and pieces which cannot be tested on a bench Hardness Tester.

Very thin metal such as shearing bands, surfaces in hardened metal such as superficial hardness starting from a thickness of 0.08 mm can be measured with the **Metaltest**. It does not spoil the surface because it produces micro-indentations.

It works on the Rockwell principle, with preload and load. There is automatic zeroing and memory of last result.

It is very light and compact with microprocessor incorporated; liquid crystal, digital display indicating the hardness value which is fixed and memorized on the display until the next test, allowing tests to be done even where there is little light.

The **new updated version** has a digital scale for : HRC, HB, HV and N mm2 instead of just HRC in the previous model.

Applications

- The best instrument to test metal films and for hardness tests on very thin surfaces such as superficial hardness treatments, chromium filling material, layer of metal filling material.
- Finished products such as aeroplane wings, medical products, jewels, surgical tools.

Features

- It measures Rockwell, Brinell & Vickers
- For All Metals - both very hard and soft
- There is automatic zeroing and memory of last result
- Direct Digital Read Out for all Scales
- For Big and Small Pieces
- Portable hardness tester with memory
- Memory of the results 100 values (each scale)
- Average of the stored results.
- Different scale on the display
- For thin surfaces starting from 0.08 mm thickness

- Suitable for flat, round and irregular pieces
- No need for adjustment if used inclined or inverted
- Easy to use - place the hardness tester on the surface to be examined and press the handgrip right down; release the pressure, the piece hardness immediately appears on the display
- Range of hardness scale from HB=5 to HV1= 1865
- Repeatability + / - 0,5 HR on test block
- Programmable tolerance HI - OK - LOW
- The penetrator is a diamond cone.

Specifications

- Accuracy +/-0.5 HRC - Unparalleled accuracy and repeatability both on very big pieces and very slim parts.
- It is supplied with a calibrated reference specimen.
- Power : 1 x 9 Volt battery, which should last for 2000 tests.
- Dimensions :   16 x 16 x 12 cm
- Weight: 1.2 kg

Standard Accessories included

- Diamond indentor
- HRC Test Block
- Adjustable base for test on flat and round pieces up to a diameter of 200 mm
- Tables and Instruction Booklet
- Supplied with certificates on SIT primary samples

Optional Accessories

- **Art 2310** large "V" support for round surfaces with more than 200 mm diameter
- **Art 2312** stand support with a series of anvils for test on small pieces; working opening 100mm; working depth 65mm
- **Art 2315** three points base for irregular surface and large round pieces →
- **Art 2316** support to perform tests on extrusion screws ↓
- **Art. 23631** Handclamp
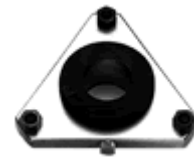
Field of application for AFFRI® Metaltest

	soft ←	→ hard	
HRA - Rockwell A	20	92	For hard steel, nitriding, cementation, roller, steel for tools, soft and hard materials
HK - Knoop	25	97	For soft steel, non ferrous metals
HRC - Rockwell C	0	80	For hard steel, nitriding, cementation, roller, steel for tools
HRB - Rockwell B	26	100	For soft steel, non ferrous metals
HR30T - Rockwell 30T	16	83	For soft steel, non ferrous metals
HB5 - Brinell 5	5	205	For aluminium, soft aluminium alloy cast iron, bronze, brass
HB30 - Brinell 30	66	884	For heat treated steel, annealed steel, drawn products, deep-drawn strip
HV - Vickers	13	1865	For all material
R - Tensile module N/mm²	226	2898	For heat treated steel, annealed steel, drawn products, deep-drawn strip
HR15N - Rockwell HR15N	69	93	For hard steel, nitriding, cementation, roller, steel for tools