

NewSonic

SonoDur2 – UCI-Handheld Probes for perfect Results

Vickers Testing under load! Attach, press and read-off the result – that`s why modern and fast hardness testing within seconds is so easy!



Meaningful UCI Hardness Measurements (Ultrasonic Contact Impedance) on surfaces in virtually any direction:

- Stable measurement results without attachment sleeves/ Tripod independent of orientation
- Facile, secure handling without additional handhold, at stable accuracy, nearly user independent
- Locally precise positioning for selective measurement – even on small test spots
- Cost effective repair work due to modular probe design



SONO-10H, HV1 (10N): Weld seams (HAZ), soft spots, nitrided & hard surface
SONO-50H, HV5 (49N): Metal working Industries in general, „Work Horse“ in heat treatment shops
SONO-100H, HV10 (98N): EN ISO 1090, construction steel, cast iron, forgings, fasteners



Use of UCI-Hardness Testing methods:

Tools and mechanical engineering, plant engineering and construction, ship building, (wind) power plants, chemical, car, and aircraft industries, maintenance and surveillance of machines and facilities.
 Materials: most of metal products, industrial ceramics

Inspection: Welded seams, heat treatment condition, material sorting

HV10: Assessment of tensile strength Rm (MPa) acc. to EN ISO 18265/ DIN 50150R_m (MPa) gemäß EN ISO 18265 / DIN 50150



Prerequisite for a steady hardness test: Surface must be clean and smooth according to spec. (DIN 50159-1). In addition the procedures described in the standards need to be considered (DIN 50159, ASTM A 1038).

NewSonic

SonoDur2 – Low Load Hardness Testing with Precision

The best that money can buy! Precision probes with motor driven test load on scratch sensitive surfaces.



Highly accurate measurements applying low test loads due to uniform and automatic indentation of the Vickers Diamond even for untrained personnel.

Curved surfaces: SONO-PM-4 probe attachments (left, chrome plating) guarantee an optimal test position by strict perpendicular and concentric material contact. Bottom side of probe shoe is designed according to requirement. Special coating for good grip or anti-friction face for easy adaptation to the shape of the work piece.



SONO-8M, HV0.9 (8.6N): general production control in metal fabrication industries, testing of gear teeth in heat treatment shops (induction hardening)

SONO-1M, HV 0.1 (1N) and SONO-3M, HV0.3 (3N): very hard surfaces (Plasma-nitride, Chrome plating >1000HV), very soft and floating materials like Copper Plating via penetration time related measurement according to specification between 1 and 99 seconds. Precious (small) parts with damageable surface for material sorting – “non-destructive” hardness measurement.



There are not many alternatives at hand compared to the UCI-Method to be used at the same time on soft Aluminum (here EN573) as on hard metal with test loads between 1N and 8.6N (motor probes) and 10N to 100N (handheld probes).

