proceq
A Screening Eagle Company

Hardness Testing

Equotip 550 UCI

The leading Ultrasonic Contact Impedance measurement system with advanced capabilities

Efficiency

Efficiency to the power of 2 thanks to three loads in one single probe HV1, HV5, and HV10 and possible combination with Portable Rockwell and Leeb in one device.

Productivity

Features with wizards, user guidance, personalised views, and on-screen feedback to reduce measurement inaccuracies that can be caused by the operator.

User Experience

User guidance, smart material, and probe selection wizards, and ready-to-go reports through a powerful built-in reporting feature facilitate even short measurement campaign.

Equotip 550 Platform
Tech Specs

Equotip 550 Platform

Display	7” color capacitive touchscreen
Instrument protection	- IP54, fully rugged with shock absorbing casing, - Scratch-resistant Gorilla® Glass screen protection, - Circuit and connector protection against dust, debris, chemicals and voltage spikes - Foldable additional screen cover for additional protection during storage and transportation
Memory	Internal 8 GB flash memory (> 1’000’000 measurements)
Combination with another testing method	Leeb, Portable Rockwell (PRT)
Connectivity	Ethernet & USB-B (PC connection), USB-A (PRT), Probe-specific slots
Battery	3.6V, Li-Ion, 14’000 mAh
Battery lifetime	> 10h (in standard operating mode)
Charging time	< 9h, < 5.5 h (External quick charger)
Power input	12V +/- 25% / 1.5A
Dimensions	250 x 162 x 62 mm / 9.87 x 6.37 x 6.44 in
Weight	1’525 g / 3.35 lbs. (incl. battery)
Humidity operation	< 95% RH, non-condensing
Operating temperature	(-) 10°C + 50°C / 14°F – 122°F
Certification	CE, KC, FCC
Equotip 550 Software Features	- Heat-Affected Zone (HAZ) maping tool - Fully customizable reporting - Customizable views - Verification wizard - Measurement wizard - Mapping wizard - Integration in automated testing environments (incl. remote control) - Custom conversion curves (1-point, 2-point, polynomial) - Built-in pdf creator
Conversion curves applicable for materials	- Steel and cast steel - Aluminium - Titanium Ti 6Al 4V - Cast Iron - Incoloy 825 / 2.4858 - 304L/1.4307 - Alloy 75/2.4630 - P/T91
Languages	English, German, French, Italian, Spanish, Portuguese, Turkish, Chinese, Korean, Russian, Japanese, Polish, Czech
Regional settings	Metric and imperial units, multi-language and time-zone
Audio support	Full digital audio

Desktop Software (Windows)

PC Software	Equotip Link for data download, management and export (CSV, PNG), Conversion curve management, and for upgrades of constantly expanding Equotip and Equotip Link Software
Language support	English, Chinese, Czech,German, Spanish, French, Italian, Korean, Japanese, Polish, Portugese, Russian, Turkish

Instrument
Tech Specs

Native Scale	HV(UCI)
Conversion scales	HLD, HB, HRC, HRA, HRB, HR15N, HR15T MPA (σ1, σ2, σ3)
Measurement range	20-2000 HV
Indenter	ISO 6507-2 compliant, 136° Vickers diamond
Impact energy / Test force	HV1 (9.8 N), HV5 (49 N), HV10 (98N) in one probe
Accredited calibration	ISO/IEC 17025
Standard compliance	ASTM A1038 DIN 50159 GB/T 34205
Guidelines	ASTM A370 ASME CRTD-91 DGZfP Gudeline MC 1 VDI / VDE Gudeline 2616 Paper 1
Conversion standards	ASTM E140 ISO 18265 Proceq's own conversion curves
Measurement resolution	1 HV(UCI), 0.1 HRC
Measuring accuracy	± 2%
Measurement deviation (E)	Lower than DIN 50159 & GB/T 34205
Coefficient of variation (R)	Lower than DIN 50159 & GB/T 34205
Weight	245 g / 8.6 oz
Dimensions	155 x ø 40 mm (6.1 x ø 1.57 inches) without foot

Standards & Guidelines	Description
ASTM A 1038	
ASTM A 370	
ASTM E 140	
DIN 50159	
GB/T 34205-2017	
ISO 18265	
ASME CRTD-91	
DGZfP Guideline MC 1	
Nordtest Technical Reports 424-1, 424-2, 424-3	
VDI / VDE Guideline 2616 Paper 1	