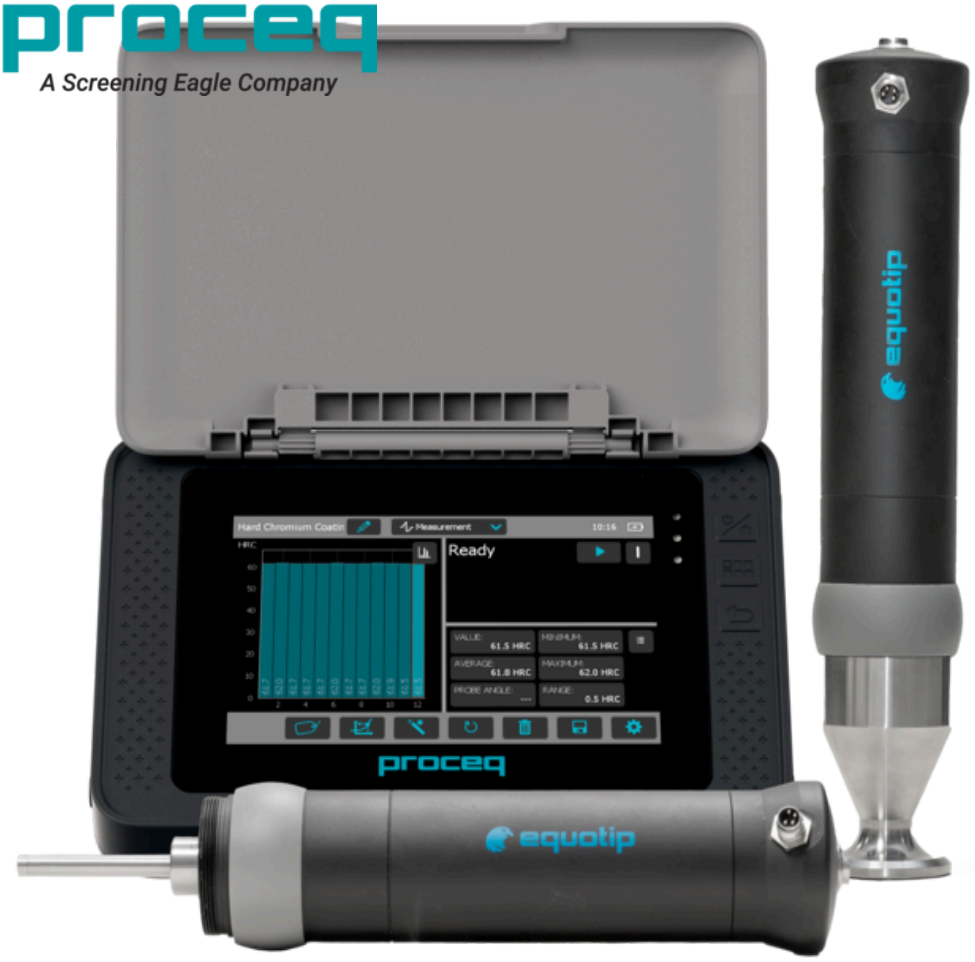
proceq
A Screening Eagle Company



Hardness Testing

Equotip 550 UCI MOTO-03 & MOTO-08

The leading Ultrasonic Contact Impedance measurement system with advanced capabilities

Consistency

Ensure low and consistent test load, which significantly reduces your impact on the measurement

Adaptability

Calibrate with ease your probe to any material you want to test, thanks to advanced material calibration features

User Experience

Place, press, done. Use software to programme the penetration time to simulate the stationary Vickers testing device

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	40-1700 HV
Indenter	ISO 6507-2 compliant, 136° Vickers diamond
Impact energy / Test force	MOTO-03:HV0.3 (3N), MOTO-08 HV0.8 (7.8N)
Accredited calibration	Proceq's Laboratory Calibration (soon available with ISO 17025 accredited calibration)
Standard compliance	ASTM A1038 DIN 50159 GB/T 34205
Guidelines	ASME CRTD-91 DGZfP Guideline MC 1 VDI / VDE Guideline 2616 Paper 1
Conversion standards	ASTM A370 ASTM E140 ISO 18265 Proceq's own conversion curves
Recommended max surface roughness	Ra 0.8 (HV0.3), Ra 1.6 (HV0.8)
Measurement resolution	1 HV(UCI), 0.1 HRC
Measuring accuracy	HV:±3%
Measurement deviation (E)	Lower than DIN 50159, GB/T 34205, & ASTM A1038
Coefficient of variation (R)	Lower than DIN 50159 & GB/T 34205
Weight	618 g / 21.8 oz
Dimensions	234x Φ 46 mm (9.21 x Φ 1.81 inches) with 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	