

NEW PRODUCT SHOWCASE

The ACA does not officially endorse any of the products advertised in *Corrosion & Materials*.



Advertise your new products here, for more info contact Tracey Winn@twinn@corrosion.com.au



Proceq Equotip UCI Hardness Tester



The Swiss-made Equotip 550 Portable Hardness Tester from Proceq is now even more impressive with the introduction of the Ultrasonic Contact Impedance (UCI) probe. Along with the range of Leeb probes and Portable Rockwell probe, the Equotip 550 offers the ultimate NDT solution to your hardness testing requirements.

The UCI Measuring Principle

The UCI (Ultrasonic Contact Impedance) method uses the same pyramid-shaped diamond as a conventional Vickers hardness tester. Unlike Vickers testing, no optical evaluation of the indentation is required, enabling fast and portable measurements. The UCI method

excites a rod into an ultrasonic oscillation. The test load is applied by a spring and typically ranges from 1 to 5 kg of force (HV1 – HV5). As the diamond is forced into the material, the frequency of the rod oscillation changes in response to the contact area between the diamond and the material under test. The instrument detects the shift in frequency, converts it to a hardness value which is immediately displayed on the screen. While measurements are shown in Vickers, automatic conversions to Rockwell and Brinell can be displayed. The UCI method excels in testing of small and complex shaped parts comprised of fine-grained metals, while the rebound method is

preferred for larger, coarse-grained forgings and castings.

The Equotip 550 Portable Hardness Tester from Proceq Switzerland is a complete all-in-one hardness testing solution which combines Leeb with portable Rockwell and now UCI (Ultrasonic Contact Impedance) methods. The Equotip 550 stands out with its new generation full colour, dual processor Touchscreen Unit packed with features. The instrument also has enhanced software with interactive wizards, automatic verification processes, personalized options, custom report functions and much more.

Advantages of UCI for NDT

- Measures only surface hardness
- Extremely fast with operator guidance when to apply and release
- Highly portable
- Test in any direction but must be perpendicular to the surface
- Can measure hardness of a coating, plating or case hardened surface
- Indentation is very small therefore non-destructive
- Small probe can access the HAZ of welds, gear teeth and splines for example
- Adjustable load for material hardness and coating with no need to change UCI probe

For more information contact Russell Fraser Sales today:

T: +612 9545 4433 F: +612 9545 4218
E: rfs@rfsales.com.au
Web: www.rfsales.com.au