

Equotip® 550 Portable Rockwell

Standards

DIN 50157

Conversion Standards

ASTM E140

ISO EN 18265

Guidelines

DGZfP Guideline MC 1

VDI / VDE Guideline 2616 Paper 1



*World-Class
Portable Static
Hardness Testing*



**Advanced algorithm option
for faster measurement**



**Probe can be connected
directly to PC**



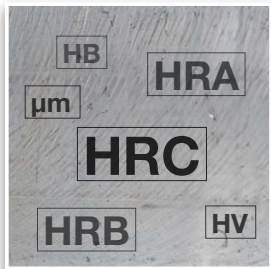
Specially For Thin Parts

Particularly suited for scratch-sensitive and polished parts or on thin parts, profiles and pipes. The required minimum thickness for a reliable hardness reading is ten times the indentation depth. For the mass there is no minimum requirement.



Suits Various Sample Geometries

Unique measuring clamp and support feet are available for the probe allowing tests to be carried out on various geometries.



Broad Hardness Scales Coverage

Measurements in HRC and HV with automatic integrated conversions to HB, HRA, HRB and many more common scales in compliance to ASTM E140 and ISO 18265.

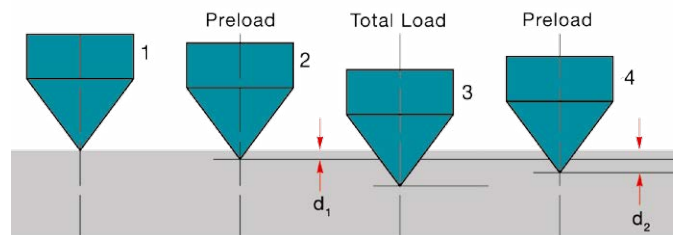


For Any Environment


The Equotip 550 Portable Rockwell can be utilized for on-site, factory and lab environment with almost no limitation.




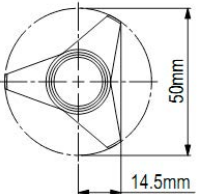

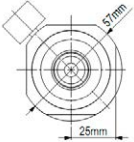
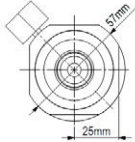
The Rockwell Measuring Principle

The test principle of the Equotip Portable Rockwell follows the traditional Rockwell static test method. During measurements with the Equotip Portable Rockwell Probe, a diamond indenter is forced into the test piece using a precisely controlled force. The indentation depth of the diamond is continuously measured while a load is applied and released. From the indentation depths d_1 and d_2 recorded at two defined loads, the difference is calculated: $\Delta = d_2 - d_1$. This is traditionally referred to as plastic deformation.



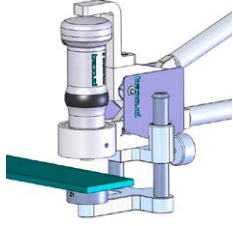
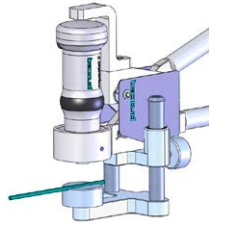
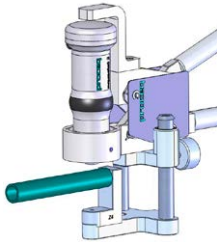
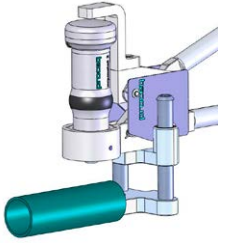
Equotip® Portable Rockwell Probe and Accessories

	Measuring range	0-100 µm; 19-70 HRC; 35-1'000 HV
	Resolution	0.1 µm; 0.1 HRC; 1 HV
	Measuring accuracy	± 0.8 µm; ~ ± 1.0 HRC over entire range
	Test loads	Preload 10 N / Total Load 50 N
	Diamond indenter	Angle 100.0° ± 0.5°, diameter of flat area of 60 µm ± 0.5 µm
	Dimensions	Ø 40 mm, Length 115 mm

 	 	  
<p>Round standard foot (magnetic) Ideal for flat parts, and test locations more than 10 mm from an edge.</p>	<p>Tripod foot Designed for tests that require accurate positioning (welds, heat-affected zones).</p>	<p>Special feet RZ 18-70 and 70-∞ Designed for curved test pieces such as cylindrical parts, tubes, pipes.</p>

The Portable Rockwell Measuring Clamp



<p>Clamp Adapters</p>	
	
<p>Support Z1 for flat parts max. 40 mm thickness</p>	<p>Support Z2 for thin cylindrical parts, wires, bolts min. Ø 3 mm</p>
	
<p>Support Z4 for tubes and pipes up to Ø 28 mm</p>	<p>Support Z4+28 for tubes and pipes over Ø 28 mm</p>