

ZwickMaterials Testing

Product Information

DynaPOCKET - Rebound Hardness Tester





Range of application

Be mobile on site! The Zwick DynaPOCKET is a device for hardness testing on site. Its compact size enables tests to be made practically anywhere, but especially where access to the test location is difficult.

Even heavy components that can't be transported are a case for this rebound hardness tester, just as are fixed installed system parts or machines.

The rebound hardness test with the Zwick DynaPOCKET is suitable mainly for solid steel or casting material test pieces.

Tests in the following applicational ranges are typical for this device:

- Large, coarse grained components with tough surfaces
- Forged parts with inhomogenous surface structures
- Parts manufactured from all sorts of casting materials
- Material differentiation in material depots
- Hardness tests on large series parts during production

Advantages and features

- Test tasks can be easily solved due to the device's small size, rapid application and simple handling.
- Small size, low weight, no cables. Thus it's a compact hardness tester that fits in any pocket.
- Impact device and display or evaluation unit are integrated in one device.
- Simple and clear to follow operation via two buttons.
- Hardness testing economically, quickly and comfortably: Simply switch it on, measure, read-offa matter of seconds! The hardness value appears straight away digitally on the easy to read LCD display.

Conversion to the following hardness scales is possible:

HL (Leeb), HS (Shore), HB (Brinell), HRB (Rockwell B), HRC (Rockwell C), HV (Vickers), N/mm² (Tensile strength).

The Zwick DynaPOCKET can also run conversions to DIN 50150 and ASTM E 140 provided it's for the material group low alloy and non-alloyed steel and steel casting.

The device specific conversion tables are valid for other materials.



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Order item	H07.DPOCKET.00	
	Value	Unit
Measurement range	150 - 1000	HL (Leeb)
(dependent upon the material group(s)	75 - 1000	HV (Vickers)
e. g. for low alloyed steel)	75 - 100	HB (Brinell)
	35 - 100	HRB (Rockwell B)
	20 - 70	HRC (Rockwell C)
	30 - 100	HS (Shore)
	250 - 2200	N/mm² (Tensile strenght)
Weight	200	g
Dimensions	38 x 170 (Diameter x Length)	mm
Temperature range	Operation: - 10 + 50	°C
	Storage: - 20 + 70	°C
Test method	Rebound hardness measurement to ASTM A 956, dynamic measurement method: quotient from rebound (Rp)- and impact (Ap) speed with output of the hardness in Leeb $HL = 1000 \text{ Rp/Ap}$	
Setup	Miniaturised, processor controlled rebound hardness tester, impact device with integrated electronics, impact energy approx. 12 N/mm², ball dia. 3 mm (Wolfram carbide ball)	
Material that can be tested	Forged, rolled and cast materials	
Saved material groups	Low/Non-alloyed steel and steel casting, tool steel, stainless steel, cast iron, spheroidal iron, aluminium cast alloys, brass, bronze, and copper wrought alloys	
Display statistics, automatic device shut down, keypad	LCD, 4-digit display of the hardness value and status symbols, average value display, automatic shut down after 3 minutes of no-use in the average value mode, low battery display, device shut down at undervoltage, soft touch keypad with 2 buttons	
Conversion scales and resolution	HL (1.0), HV (1.0), HB (1.0), HS (0.1), HRC (0.1), HRB (0.1), N/mm ² (5.0)	
Conversion	To DIN 50150, ASTM E 140, device specific (Dyna)	
Current supply and duration of operation	Battery operation (2x MICRO AAA batteries, NiCd, NiMH or AlMn), > 4000 measurements (dependent upon the battery operation)	
Test attachments and further accessories	e. g. for better positioning of curved surfaces, for convex, concave, and	
on request	cylindrical surfaces, etc. (Dyna 41 and Dyna 42)	