PORTABLE HARDNESS TESTING

Bowers METROLOGY GROUP Testing Instruments

Portable Hardness Tester IPX-300

Handheld dynamic metal hardness tester with hardness conversion and automatic position setting

Features

- Dynamic hardness testing; quick and reliable
- Impact device D integrated: no cables!
- Wide measuring range in HLD and direct display of converted hardness values in Rockwell HRB, HRC, Vickers HV, Brinell HB, Shore HS
- For most metals (see table)
- Provides testing at any angle, even upside down
- Simple handling and low test expenditure
- High accuracy tolerance of maximum 0.5% on solid parts
- Clear LCD display showing all functions and parameters
 USB data output and internal memory batch of 255
- average readings
- Conforming to ASTM A 956

Material	HLD	HRC	HRB	HB	HV	HS
Steel and cast steel	300-900	20-68	38.4-99.5	80-647	80-940	32.5-99.5
Cold work tool steel	300-640	20.4-67	-	-	80-898	-
Stainless steel	300-800	19.6-62	46.5-100.7	85-655	85-802	-
Grey cast iron	360-650	-	-	93-334	-	-
Nodular cast iron	400-660	-	-	131-387	-	-
Cast aluminium alloys	180-560	-	-	30-159	-	-
Brass	200-540	-	13.5-95.3	40-173	-	-
Bronze	300-700	-	-	60-290	-	-
Copper	200-690	-	-	45-315	-	-

TECHNICAL SPECIFICATION

Hardness parameter	HLD, HRC, HRB, HV, HB, HS			
Tensile strength UTS range (steel only)	σb from 370 to 2000 (106 N/mm≈)			
Measuring range / metallic materials	See table			
Accuracy	Within \pm 0.5% (at HLD = 800) on solid parts			
Statistics	Average value			
Memory	255 groups, 5 test results per group			
Output	USB			
Impact device	D (standard) integrated			
Workpiece max. hardness value	940HV			
Workpiece radius (convex/concave)	R.min = 50mm (with support ring R.min = 10mm)			
Workpiece minimum weight	2.5kg on solid support (0.1kg with couplant paste)			
Workpiece min. thickness coupled	3mm			
Workpiece min. case hardened depth	0.8mm			
Indentation depth	See Impact devices data			
Power	2 x AAA battery 1.5V (low batt warning) (not included)			
Operating temperature	5 to 50°C			
Overall dimensions	135mm x 55mm x 25mm			
Weight of main unit	250gr			

Standard Delivery

- Main unit with integrated impact device type D
- Test block with HLD value
- Cleaning brush
- Plastic carrying case
- INSPEX certificate
- Installation & user manual

Optional Accessories

- Test blocks UKAS certified in any hardness parameter
- Support rings for convex and concave surfaces
- Software
- Data cable

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