

TH-170

Material	HLD	HRC	HRB	HRA	HB	HV	HS
Steel and cast steel	300-900	20-68	39-100	59-86	81-654	81-955	32-100
Cold work tool steel	300-840	20-67	-	-	-	80-898	-
Stainless steel	300-800	20-62	46-101	-	85-655	85-802	-
Grey cast iron	360-650	-	-	-	93-334	-	-
Nodular cast iron	400-660	-	-	-	131-387	-	-
Cast aluminium alloys	200-570	-	24-34	-	27-164	-	-
Brass	200-550	-	13-95	-	40-173	-	-
Bronze	300-700	-	-	-	60-290	-	-
Copper	200-690	-	-	-	45-315	-	-

The ranges are stipulated by the application limits of the relevant static procedure

TH-172

Material	HLC	HB	HRC	HV	HS
Steel and cast steel	350-960	80-683	20-69	80-996	31-102
Cold work tool steel	350-900	-	20-68	100-941	-

The ranges are stipulated by the application limits of the relevant static procedure

TH-174

Material	HLDL	HB	HRB	HRC	HV	HS
Steel and cast steel	560-950	81-646	37-100	21-68	80-950	30-96

The ranges are stipulated by the application limits of the relevant static procedure

Technical specifications

Hardness parameter	HRC, HRB, HRA, HV, HB, HS, HLD or HLC or HLDL
Measuring range/ metallic materials	See table above
Accuracy	Within ± 6 HLD (TH-170) Within ± 12 HLC (TH-172) Within ± 12 HLDL (TH-174)
Statistics	Average (max. 99)
Output	RS232
Min. Surface roughness of workpiece	1.6 μ m (Ra) (TH-170/ 174), 0.4 μ m (Ra) (TH-172)
Impact device	D (standard) integrated (TH-170) C integrated (TH-172) or DL integrated (TH-174)
Needle front section of DL-device (TH-174)	Diameter = 4.2mm Length = 50mm
Workpiece max. hardness value	900 HLD (TH-170) 960 HLC (TH-172) 950 HLDL (TH-174)
Workpiece radius (convex/ concave)	Rmin = 50mm (with support ring Rmin= 10mm)
Workpiece minimum weight	2kg-5kg on solid support (TH-170/ 174) 0.5kg-1.5kg on solid support (TH-172) (0.05kg-2kg with couplant paste) (TH-170/ 174) (0.02kg-0.5kg with couplant paste) (TH-172)
Workpiece min. thickness coupled	5mm (TH-170/ 134), 1mm (TH-172)
Workpiece min. case hardened depth	0.8mm (TH-170/ 134), 0.2mm (TH-172)
Indentation depth	See page: Impact devices data
Power	Rechargeable battery NiMH 3.6V, 70mAh
Charger	9V, 200mA (1.8VA)
Charging time	8 hours
Operating temperature	0°C to 40°C
Overall dimensions	155mm x 24mm x 55mm (TH-170/ 172) 210mm x 24mm x 55mm (TH-174)
Dimensions DL impact device (TH-174)	LxD 50mm x 4mm diameter
Weight	180gr (TH-170/ 172) or 200gr (TH-174)



MINI-PRINTER TA-220

Reliable and fast mini-printer with quality EPSON print head and clear LCD display, RS232 interface. Optional data cable TA-510 to IMPACT series available. Prints all numerical IMPACT hardness test data direct real-time or per batch after testing.



TEST BLOCK D

For performance tests of IMPACT series a test block D is available (HLD hardness value). Tolerance allowed is ± 6 units HLD. Values too low: impact device dirty. Value too high: spherical test tip flattened, or test block impacted all over. Optional : similar test block D but UKAS certified according to any hardness scale such as HRC or HV for traceable reference.

COUPLANT

Light parts can be coupled to a solid base plate using a thin layer of couplant paste. Both contact surfaces must be perfectly flat.



SUPPORT RINGS

On curved surfaces having a radius of under 30mm, effective positioning on the component is facilitated by the use of support rings. This ring can be screwed on front of the impact device.

We offer a set of 7 rings:
convex model 10mm-15mm / 14.5mm-30mm / 25mm-50mm,
concave model 11mm-13mm / 12.5mm-17mm / 16.5mm-30mm,
universal model.