

Special Purpose Impact Devices for Hardness Testers

OPTIONAL IMPACT DEVICES

The unit is fitted with universal impact device D. Special impact devices are available for use in extremely confined spaces, with special component geometry or surface finish. These significantly extend the possibilities of application for the procedure. Each special impact device is compatible with unit D indicating device and is supplied as an optional accessory. Compatible with Hardness Tester Models: TH 160, TH 170, TH 370pro & TH 420



Optional Impact Devices

Impact device		D	DC	DL	D+15	C	G
Application		For the majority of your hardness testing requirements.	Use in very confined spaces, e.g. in holes, cylinders or for internal measurements on assembled machines.	For measurements in extremely confined spaces or at the base of grooves.	For measurements in grooves or recessed surface.	Surface hardened components, coatings, thin walled or impact sensitive components (small measuring indentation).	Solid components. E.g. heavy castings and forgings.
Impact energy		11Nmm	11Nmm	11Nmm	11Nmm	3Nmm	90Nmm
Mass of impact body		5.5g	5.5g	7.3g	7.8g	3g	20g
Tip	Diameter	3mm	3mm	3mm	2.78mm	3mm	5mm
	Hardness	1600HV	1600HV	1600HV	1600HV	1600HV	1600HV
	Material	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide
Impact device	Length	147mm	86mm	202mm	162mm	141mm	254mm
	Diameter	20mm	20mm	20mm	20mm	20mm	30mm
	Weight	75g	50g	100g	80g	75g	250g
Max. hardness of sample		940HV	940HV	950HV	940HV	1000HV	650HB
The average roughness of sample		Ra: 1.6µm	Ra: 1.6µm	Ra: 1.6µm	Ra: 1.6µm	Ra: 0.4µm	Ra: 6.3µm
Min. weight of sample	of compact shape	5 kg / 11lbs	5 kg / 11lbs	5 kg / 11lbs	5 kg / 11lbs	1.5 kg / 3.3 lbs	15 kg / 33 lbs
	on solid support	2 kg / 4.5 lbs	2 kg / 4.5 lbs	2 kg / 4.5 lbs	2 kg / 4.5 lbs	0.5 kg / 1.1 lbs	5 kg / 11 lbs
	coupled on plate	0.05 kg / 0.2 lbs	0.05 kg / 0.2 lbs	0.05 kg / 0.2 lbs	0.05 kg / 0.2 lbs	0.02 kg / 0.045 lbs	0.5 kg / 1.1 lbs
Min. thickness of sample	uncoupled	25 mm / 0.98 inch	25 mm / 0.98 inch	25 mm / 0.98 inch	25 mm / 0.98 inch	15 mm / 0.59 inch	70 mm / 2.73 inch
	coupled	3 mm / 0.12 inch	3 mm / 0.12 inch	3 mm / 0.12 inch	3 mm / 0.12 inch	1 mm / 0.04 inch	10 mm / 0.4 inch
	surface layer thickness	0.8 mm / 0.03 inch	0.8 mm / 0.03 inch	0.8 mm / 0.03 inch	0.8 mm / 0.03 inch	0.2 mm / 0.008 inch	
Indentation size on test surface with 300 HV, 30 HRC	diameter	0.54 mm / 0.21 inch	0.54 mm / 0.21 inch	0.54 mm / 0.21 inch	0.54 mm / 0.21 inch	0.38 mm / 0.015 inch	1.03 mm / 0.04 inch
	depth	24 µm / 960 µinch	24 µm / 960 µinch	24 µm / 960 µinch	24 µm / 960 µinch	12 µm / 480 µinch	53 µm / 2120 µinch
Indentation size on test surface with 600 HV, 55 HRC	diameter	0.45 mm / 0.017 inch	0.45 mm / 0.017 inch	0.45 mm / 0.017 inch	0.45 mm / 0.017 inch	0.32 mm / 0.012 inch	0.9 mm / 0.035 inch
	depth	17 µm / 680 µinch	17 µm / 680 µinch	17 µm / 680 µinch	17 µm / 680 µinch	8 µm / 2560 µinch	41 µm / 1640 µinch
Indentation size on test surface with 800 HV, 63 HRC	diameter	0.35 mm / 0.013 inch	0.35 mm / 0.013 inch	0.35 mm / 0.013 inch	0.35 mm / 0.013 inch	0.30 mm / 0.011 inch	
	depth	10 µm / 400 µinch	10 µm / 400 µinch	10 µm / 400 µinch	10 µm / 400 µinch	7 µm / 280 µinch	