

FEATURES

- ⊙ High quality metal shell.
- ⊙ Automatically identify 7 types of Impact Devices for special application.
- ⊙ Freely switch to hardness scales HRB, HRC, HV, HB, HS, HL.
- ⊙ Direct calibration on HL, HRC, HB.
- ⊙ Test at any angle, even upside down
- ⊙ Large LCD screen with back-light, showing all functions and parameters.
- ⊙ Conversion to tensile strength (U.T.S)

MEASURING MATERIALS

Steel and cast steel, alloy tool steel, stainless steel, gray cast iron, nodular cast iron, cast aluminum alloy, copper zinc alloys (brass), an alloy of copper and tin, copper (bronze), forged steel.





TECHNICAL SPECIFICATION

Model	Leeb130
Measuring Range	(170-960)HLD,(17.9-69.5)HRC,(19-683)HB,(80-1042)HV,(30.6-102.6)HS, (59.1-88)HRA,(13.5-101.7)HRB
Hardness parameter	HL,HRC,HRB,HS,HB,HV
Accuracy	±6HLD/±1.5HRC
Display	LCD with Back-Light
Memory	350 Groups
PC Connection	Available
Battery	2 AAA
Operating Temperature	-20℃~+60℃
Dimensions	130×70×25mm
Impact Device Type	D,DC,DL,D+15,G,C,E
Weight	300g
Standard Delivery	Main Unit, Impact Device Type D,Operation Manual,Power Adapter,Small Supporting Ring,Cleaning Brush,Calibration Block.
Optional Accessories	Optional Impact Devices,Shaped Support Ring,Software.

OPTIONAL IMPACT DEVICES [PROBES]



APPLICATION FIELDS

- The bearings and other parts, heavy work-pieces, metal material, pressure vessel, failure analysis of turbine generator unit and equipment.
- Mechanical or permanent assembly components have been installed, the test space is very narrow, requires the original record regular test results.
- Large work-piece within a wide range of more rapid test measurement site.

MEASURING CONDITIONS

- The weight of measuring object must be more than 2kg.
- The thickness must be more than 10mm.
- The surface roughness must be no less than 1.6 μ m.
- Tips: If do not meet the above conditions, the measuring object should be laminated with steel substrate by coupling agnts.

SPECIAL SUPPORTING RING [USE FOR DIFFERENT SHAPE SURFACE]

Model	Notice	Model	Notice
Z10-15	Outside Cylinder R10-15	K10-15	Outside Sphere R10-15
Z14.5-30	Outside Cylinder R14.5-30	K14.5-30	Outside Sphere R14.5-30
Z25-50	Outside Cylinder R25-50	HK11-13	Inside Sphere R11-13
HZ11-13	Inside Cylinder R11-13	HK12.5-17	Inside Sphere R12.5-17
HZ12.5-17	Inside Cylinder R12.5-17	HK16.5-30	Inside Sphere R16.5-30
HZ16.5-30	Inside Cylinder R16.5-30	UN	Outside Cylinder, Radius can be adjusted R10- ∞

MEASURING RANGE

	Hardness	Impact Device			
		D/DC/DS	C	G	DL
ST&Cast ST	HRC	17.1-68.5	20.0-69.5		20.6-68.2
	HRB	59.6-99.6		47.7-99.9	37.0-99.9
	HB	140-651	80-683	90-646	150-646
	HV	83-976	80-996		85-950
	HS	26.4-99.5	31.9-102.3		26.5-99.4
Forged steel	HB	142-651			
CWT Steel	HRC	17.1-67.1	20.0-69.5		
	HV	83-976	80-996		
Stainless	HRB	59.6-99.6			
	HB	140-651			
	HV	83-976			
GC Iron	HB	140-334		92-326	
NC Iron	HB	140-387		140-364	
Cast Alum.	HB	30-159			
	HB	40-173			
Brass	HRB	13.5-95.3			
	HB	60-290			
Bronzes	HB	60-290			
Copper	HB	45-315			

TECHNICAL SPECIFICATION OF IMPACT DEVICE

Optional Impact Device	DC/D/DL/DS	D+15	C	G	E
Impact Energy	11mj	11mj	2.7mj	90mj	11mj
Impact Body Weight	5.5/5.5/7.2/5.5(g)	7.8(g)	3.0(g)	20(g)	5.5(g)
Hardness of Impact Ball	1600HV	1600HV	1600HV	1600HV	5000HV
Diameter of Impact Ball	3mm	3mm	3mm	5mm	3mm
Material of Impact Ball	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Diamond
Diameter of Impact Device	20/20/6/20mm	20mm	20mm	30mm	20mm
Length of Impact Device	86/147/202/138mm	162mm	141mm	254mm	155mm
Weight of Impact Device	50/75/60/70g	80g	75g	250g	80g
Specimen Maximum	940/940/950/940HV	940HV	1000HV	650HB	1200HV

Hardness

Average roughness of specimen surface(Ra)	1.6μm	1.6μm	0.4μm	6.3μm	1.6μm
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Specimen Minimum Weight

Direct Measurement weight	>5kg	>5kg	>1.5kg	>15kg	>5kg
Need to support fixed Weight	2~5kg	2~5kg	0.5~1.5kg	5~15kg	2~5kg
Need coupling support Weight	0.05~2kg	0.05~2kg	0.05~0.5kg	0.5~5kg	0.05~2kg

Specimen Minimum Thickness

Need coupling support Thickness	5mm	5mm	1mm	10mm	5mm
Hardening Layer Minimum Thickness	≥0.8mm	≥0.8mm	≥0.2mm	≥1.2mm	≥0.8mm

Size of Ball Indentation

300HD Indentation Diameter	0.54mm	0.54mm	0.38mm	1.03mm	0.54mm
300HD Indentation Depth	24μm	24μm	12μm	53μm	24μm
600HD Indentation Diameter	0.54mm	0.54mm	0.32mm	0.90mm	0.54mm
600HD Indentation Depth	17μm	17μm	8μm	41μm	17μm
800HD Indentation Diameter	0.35mm	0.35mm	0.35mm	...	0.35mm
800HD Indentation Depth	10μm	10μm	7μm	...	10μm

Impact Device Scope of Application	DC:Inner Hole/within the Cylinder, DL:Slender Narrow Slot/Hole; D:Conventional DS:Assembly Line OnLine Detection (Loading and Release is Only One Time)	D+15: Interface is small,long, groove or the surface of the recess	C:Impact is small, Undamage hardening layer,for small,light, thin parts and hardening layer	G:For castings and forgings of large, thick, heavy and surface is rough	E:Suitable for measuring material with very high hardness
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