# SHL-140 Portable Leeb Hardness Tester

SHL-140 portable Leeb hardness tester can directly measure Rockwell (HRC, HRB), Leeb (HL), Brinell (HB), Vickers (HV), Shore (HS) hardness values. Conforms to international standards and "Leeb hardness tester specifications ZBN71010-1990" promulgated by the Ministry of Machinery Industry, "Metallic hardness test method GB/T 17394-1998" promulgated by the State Bureau of Quality and Technical Supervision, and Leeb hardness tester standard JB/ T9378-2001 and other standards.

The SHL-140 can be equipped with D-type and DL-type impact bodies, which achieves the ultimate in portability while achieving a powerful dual-purpose function that greatly facilitates the user. Ultra-low power design, using high-performance lithium battery to achieve long work and standby time, more compact and flexible design increases the flexibility of use.

According to the principle of measuring the hardness of the Leeb, high-precision detection of various metal materials is possible. Support "Steel" material, when testing the "forged steel" sample with D/DC type impact device, it can directly read the HB value without manual check. It is convenient to switch to all hardness systems (HL, HB, HRB, HRC, HRA, HV, HS) and convert the hardness measurement values in parallel.



#### **Features**

Full English display, menu type operation, simple and convenient operation. OLED LCD screen, easy to use in any environment.

A main engine can be equipped with 7 different impact devices. It does not need to recalibrate when replacing, and automatically identify the type of impact device.

It can store 48~350 groups (impact times 32~1) single measurement value, average value, date of measurement, direction of impact, frequency, material, hardness system and so on.

The upper and lower limits of hardness values can be set in advance, automatic alarm is out of range, and it is convenient for users to batch test.

### Technical parameters

Indication error and repeatability

Item	Impact device type	Hardness value of standard Leeb hardness block	Indication error	Indicator repeatability
1	D	760 ± 30HLD 530 ± 40HLD	±5 HLD ±8 HLD	5 HLD 8 HLD
2	DC	760 ± 30HLDC 530 ± 40HLDC	±5 HLDC ±8 HLDC	5 HLD 8 HLD
3	DL	878 ± 30HLDL 736 ± 40HLDL	±10 HLDL	10 HLDL
4	D+15	766 ± 30HLD+15 544 ± 40HLD+15	±10 HLD+12	10 HLD+12
5	G	590 ± 40HLG 500 ± 40HLG	±10 HLG	10 HLG
6	E	725 ± 30HLE 508 ± 40HLE	±10 HLE	10 HLE
7	С	822 ± 30HLC 590 ± 40HLC	±10 HLC	10 HLC

Measuring range	HLD (170-960)HLD	
Measurement direction	360°	
Hardness system	Leeb, Brinell, Rockwell A, Rockwell B, Rockwell C, Vickers, Shore	
Display	OLED, 128×32 graphics dot matrix LCD	
Data storage	48~350 groups (impact times 32~1)	
Limit setting range	Same as measurement range	
Battery	3V, (1200mAh) Alkaline Battery	
Ambient temperature	0~40° C	
Storage temperature	-25 to 70° C	
Continuous working time	About 40 hours	
Dimensions	148×71×33mm (main part)	
Weight	About 165g (main part)	

## Standard configuration

Main part	1
D type impact device	1
Small support ring	1
Nylon Brush (I)	1
High value Leeb hardness block	1

## Optional accessories

- 1. Various shaped impact devices and support rings
- 2. High, medium and low value hardness block

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