



# Pen Type Leeb Hardness Tester

Lpad H100/H110/H120

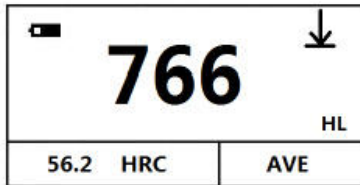
## Lpad: Smart and Portable.

The H series of Lpad are the portable hardness testing instruments, which integrated the smartest NDT technology and the smallest dimension. The Lpad hardness tester is a revolutionary product that can test most of the metal objects. With the pen type design and innovative D/DL impacting probes, the Lpad H series products provide convenient and reliable experience of testing.

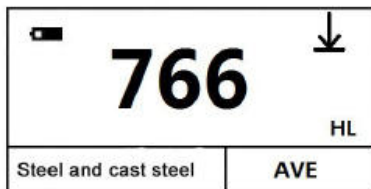
With its small size, impressive design, competitive price, convenient using experience, The Lpad hardness tester can widely be used in various situations.



148mm× 40mm× 30mm



Display interface (H100)



Display interface (H110/H120)

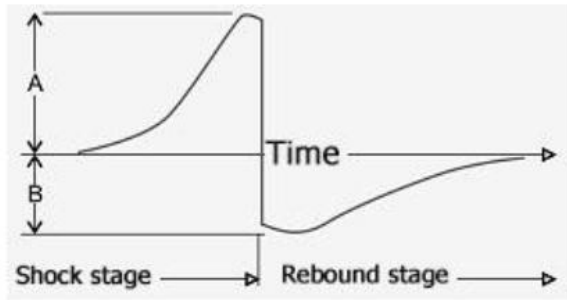


The support ring

## Features:

- **Intelligent operation**  
Easy operation with several buttons, magnitude and Rockwell values displayed.
- **Industrial bright OLED display**  
Good performance of OLED display, even in the sunshine.
- **Accurate measurement value**  
high accuracy shown value error  $\pm 0.5\%$  (HLD=800), showing the value of repeatability of 0.8%
- **Supports a variety of hardness standards**  
HL, HV, HRA, HRC, HRB, HB, HV, HS
- **Large capacity of data storage**  
Mass storage hitherto unknown, leading the technology trend. The retention of data to measure the hardness of 300 groups.
- **Support "forged steel (Steel)" materials**  
Hardness values can be preset, limit, beyond the range of automatic alarm, convenient batch testing needs.
- **Working Hours: 10 hours**

Note: the above features are related to the type of the machine , please refer to the following data.



Leeb hardness measurement principle



Born with color



**Specification :**

Testing direction	Highly accurate in any impact direction
Testing 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 Standards	HL, HV, HRA, HRC, HRB, HB, HV, HS
Accuracy	HLD: ±0.5% (800HLD)
Repeatability Value	HLD: 0.8% (800HLD)
Resolution	128×64 OLED display
Dimensions	148mm×40mm×30mm

Power Supply	Rechargeable lithium battery
Working Hours	About 10 hours
Working Conditions	Operating temperature: 10-50 c; Storage temperature: -30 °C -60 °C; Humidity: 90% max;
Standard Equipped:	The instrument host 1 The nylon brush 1 Small bearing rings 1 The ABS instrument 1
Applicable 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)	
Application	Bearings and other parts; Failure analysis of pressure vessel, steam turbine generator group and equipment; Heavy workpieces; Mechanical or permanent assembly installed; The test space is very narrow; The original record of formal requirements on test results;

**Application:**



**Pen-type hardness tester**

Model	Keys/Menu	Data Store	Probe	Testing Block	Hardness Standards	Applicable materials	Impact Direction
Lpad H100	X	270	D	Optional	HL, HRC	Steel and cast steel	Up, Down, Horizontal
Lpad H110	√	270	D	Optional	HL, HV, HRA, HRC, HRB, HB, HV, HS	Steel and cast steel, alloy tool steel, stainless steel, gray cast iron, nodular cast iron, cast aluminum alloy	360°
Lpad H120	√	270	DL	Optional	HL, HV, HRA, HRC, HRB, HB, HV, HS	Steel and cast steel, alloy tool steel, stainless steel, gray cast iron, nodular cast iron, cast aluminum alloy	360°

.. Commonly used material hardness value

.. Impact device technical parameters

Super portable and smart.



Material	Hardness Standard	Impact device		Impact device	D/DL
		D	DL		
Steel and cast steel	HRC	17.9~68.5	20.6~68.2	The impact energy	11mJ
	HRB	59.6~99.6	37.0~99.9	Impact of body mass	5.5g/7.2g
	HRA	59.1~85.8		Ball hardness:	1600HV
	HB	127~651	81~646	Ball diameter:	3mm
	HV	83~976	80~950	Material of the ball:	tungsten carbide
	HS	32.2~99.5	30.6~96.8	Impact device diameter:	20mm
Steel	HB	143~650		Impact device length:	86(147)/ 75mm
CWT、ST	HRC	20.4~67.1		Weight of the device:	50g
	HV	80~898		The maximum hardness:	940HV
Stainless steel	HRB	46.5~101.7		Surface average roughness Ra :	1.6µm
	HB	85~655		The minimum weight of specimen:	
	HV	85~802		Direct measurement	>5kg
GC. IRON	HRC			Stable support	2~5kg
	HB	93~334		To compact coupling	0.05~2kg
	HV			The minimum thickness of specimen	
NC. IRON	HRC			Dense coupling	5mm
	HB	131~387		The minimum depth of hardened layer	≥0.8mm
	HV			<b>Indentation size</b>	
C. ALUM	HB	19~164		The hardness of 300HV	The indentation diameter 0.54mm 24µm
	HRB	23.8~84.6		The hardness of 600HV	The indentation diameter 0.54mm 17µm
BRASS	HB	40~173		The hardness of 800HV	The indentation diameter 0.35mm 10µm
	HRB	13.5~95.3		Impact device applicable scope	
BRONZE	HB	60~290		DL measurements on elongated slot or hole;	
COPPER	HB	45~315			





