



Härteprüfung nach Leeb

Lpad H100/110/120

Leicht tragbares, stiftgroßes Prüfgerät für Härteprüfungen von Metallen

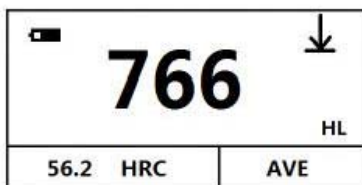
Die Lpad-Härteprüfgeräte arbeiten nach der Rückprallmethode nach Leeb. Die Geräte sind leicht tragbar in jeder Jackentasche. Sie messen nahezu alle Härtegrade mit einer hohen Genauigkeit von 0,5%.

Die Bleistift großen Geräte messen mit Ihren zwei Prallkörpern D/DI-Härten von allen Metallen über alle Messbereiche. Zum Teil können sie aus allen Richtungen auf das Werkstück aufgesetzt werden.

Das brillante OLED-Display macht das Arbeiten mit diesem kleinen Werkzeug zu einer wahren Freude!



148mm × 40mm × 30mm



Display interface (H100)



Display interface (H110/H120)



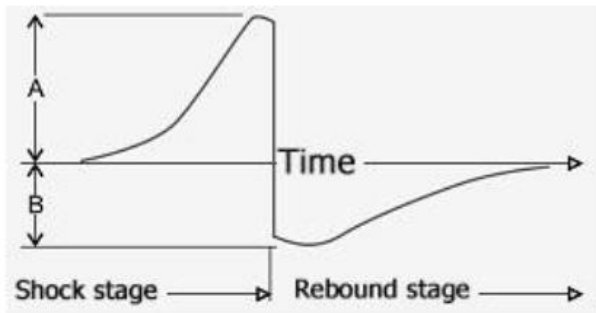
The support ring

Eigenschaften:

- Für alle Stähle und Aluminium
- Alle Standards wie HL, HV, HRA, HRC, HRB, HB, HS
- Genauigkeit: 0,5 %
- Sensortyp H100-120: D, DL
- Sensortyp H210: D, DL, D+15, DC, C, E, G
- H110-120: Speicher für 300 Messungen
- H210: USB Stick Speicherung

Vorteile:

- Gute Ablesbarkeit mit OLED Display
- Leicht tragbares Pen-Design
- Alle Daten am Arbeitsplatz auslesbar



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: $\pm 0.5\%$ (800HLD)
Repeatability Value
HLD: 0.8% (800HLD)
Resolution
128x64 OLED display
Dimensions
148mmx40mmx30mm

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	
		D	DL
Steel and cast steel	HRC	17.9~68.5	20.6~68.2
	HRB	59.6~99.6	37.0~99.9
	HRA	59.1~85.8	
	HB	127~651	81~646
	HV	83~976	80~950
	HS	32.2~99.5	30.6~96.8
Steel	HB	143~650	
CWT, ST	HRC	20.4~67.1	
	HV	80~898	
Stainless steel	HRB	46.5~101.7	
	HB	85~655	
	HV	85~802	
GC. IRON	HRC		
	HB	93~334	
	HV		
NC, IRON	HRC		
	HB	131~387	
	HV		
C. ALUM	HB	19~164	
	HRB	23.8~84.6	
BRASS	HB	40~173	
	HRB	13.5~95.3	
BRONZE	HB	60~290	
COPPER	HB	45~315	

Impact device		D/DL
The impact energy		11mJ
Impact of body mass		5.5g/7.2g
Ball hardness:		1600HV
Ball diameter:		3mm
Material of the ball:		tungsten carbide
Impact device diameter:		20mm
Impact device length:		86(147)/ 75mm
Weight of the device:		50g
The maximum hardness:		940HV
Surface average roughness Ra :		1.6µm
The minimum weight of specimen:		
Direct measurement		>5kg
Stable support		2~5kg
To compact coupling		0.05~2kg
The minimum thickness of specimen		
Dense coupling		5mm
The minimum depth of hardened layer		≥0.8mm
Indentation size		
The hardness of 300HV	The indentation diameter	0.54mm 24µm
The hardness of 600HV	The indentation diameter	0.54mm 17µm
The hardness of 800HV	The indentation diameter	0.35mm 10µm
Impact device applicable scope		DL measurements on elongated slot or hole;