

TMTECK

Leeb Hardness Tester



Leeb hardness tester THL210



Features

LCD display of 128×64 matrix with back-light, showing all functions and parameters.

Converts to all common hardness scales (HV,HB,HRC,HRB,HRA,HS).

English displaying and easy and convenient menu operation.

Powerful PC Software available and USB 1.0 interface and USB with Protective Membrane.

7 types of Impact Device optional, which don't need to be recalibrated when changing them.

Memory of 600 groups data (impact times:32~1) .

Lower limit setting and sound alarm.Material of "cast steel" is added; HB values can be read out directly when D/DC impact device is used to measure "cast steel" work piece.

Printer be separated from main unit and copies of testing results can be printed as required.

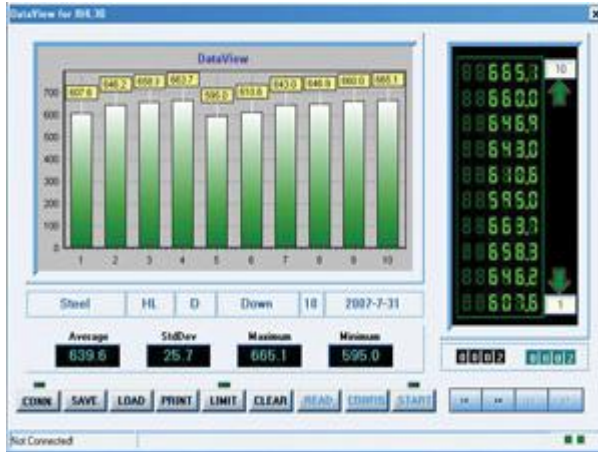
Normal battery AAA and big power store while USB connected and charging controlling circuit.

Inbuilt function of Software Calibration.

Specifications

Hardness scale	HL, HB, HRB, HRC, HRA, HV, HS
Memory	48~600 groups (impact times: 32~1)
Measuring range	HLD (170~960) See below table 1 and table 2
Accuracy	$\pm 6\text{HLD}$ (760 \pm 30HLD) error of displayed value
Standard Impact Device	D
Optional Impact Devices	DC/D+15/G/C/DL
Min. Radius of Workpiece	Rmin = 50mm (with special support ring) Rmin= 10mm)
Min. Workpiece weight	2~5kg on stable support
	0.05~2kg with compact coupling
Min. Workpiece thickness	5mm (Impact Devices D/DC/DL/D+15)
	1mm (Impact Device C)
	10mm (Impact Device G)
Min. thickness of hardened surface	0.8mm
Power	Normal AA Battery
Continuous Working time	approx. 100 h (no back light off)
Operating temperature	0~40°C
Relative humidity	$\leq 90\%$
Overall dimensions	125*67*31mm (main unit)
Weight	0.3kg (main unit)

Datapro for Hardness tester THL210



Standard Configuration

Seq	Name	Qty	Remark
1	THL210 Main Unit	1	Standard configuration
2	Impact Device Type D	1	Standard configuration
3	Leeb Standard Test Block	1	Standard configuration
4	Cleaning Brush	1	Standard configuration
5	Supporting Ring	1	Standard configuration
6	Communication Cable	1	Standard configuration
7	Manual	1	Standard configuration
8	Carrying Case	1	Standard configuration
9	THL210 DataPro Software(USB)	1	Standard configuration
10	Mini-printer	1	Optional configuration



High precision hardness tester THL280 PLUS



Features

LCD display of 128×64 matrix with back-light, showing all functions and parameters.

Converts to all common hardness scales (HV,HB,HRC,HRB,HRA,HS).

English displaying and easy and convenient menu operation.

Powerful PC Software available and USB 2.0 interface & with the USB Protective Membrane.

7 types of Impact Device optional, which don't need to be recalibrated when changing them.

Memory of 600 groups data (impact times:32~1) .Lower limit setting and sound alarm.

Material of "cast steel" is added; HB values can be read out directly when D/DC impact device is used to measure "cast steel" work piece.

Printer be separated from main unit and copies of testing results can be printed as

required.

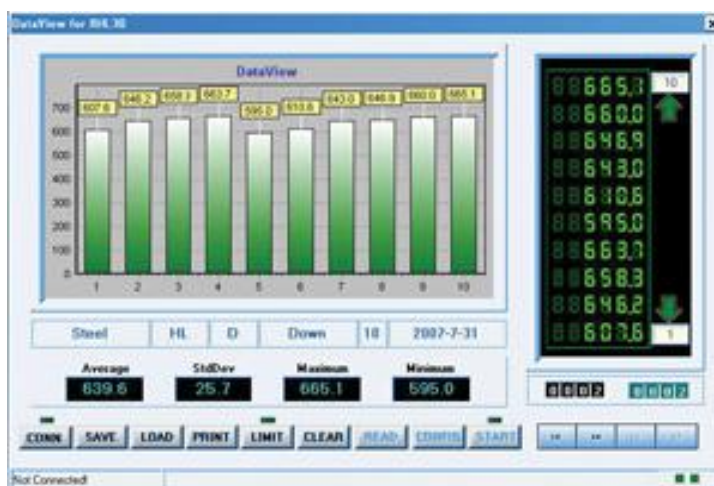
AA battery can easy change and transport.

Inbuilt function of Software Calibration.

Specifications

Hardness scale	HL, HB, HRB, HRC, HRA, HV, HS
Memory	48~600 groups (impact times: 32~1)
Measuring range	HLD (170~960) See below table 1 and table 2
Accuracy	±4HLD (760±30HLD) error of displayed value
	4HLD (760±30HLD) repeatability of displayed value
Standard Impact Device	D
Optional Impact Devices	DC/D+15/G/C/DL
Max. Workpiece Hardness	996HV(For Impact Devices D/DC/DL/D+15/C) 646HB(For Impact Device G)
Min. Radius of Workpiece	Rmin = 50mm (with special support ring Rmin=10mm)
Min. Workpiece weight	2~5kg on stable support
Min. Workpiece thickness	5mm (Impact Devices D/DC/DL/D+15) 1mm (Impact Device C) 10mm (Impact Device G)
Min. thickness of hardened surface	0.8mm
Power	AA battery
Continuous Working time	approx. 100 h (no back light off)
Charging time	2-3.5 h
Operating temperature	0~40°C
Relative humidity	≤90%
Overall dimensions	125*67*31mm (main unit)

Datapro for Hardness tester THL280 PLUS



Standard Configuration

Seq	Name	Qty	Remark
1	Main Unit	1	Standard configuration
2	Impact Device Type D	1	Standard configuration
3	Test Block Type D	1	Standard configuration
4	Cleaning Brush	1	Standard configuration
5	Supporting Ring	1	Standard configuration
6	Communication Cable	1	Standard configuration
7	Manual	1	Standard configuration
8	Carrying Case	1	Standard configuration
9	DataPro Software(USB)	1	Standard configuration
10	Battery Case Tool	1	Standard configuration
11	Mini-printer	1	Optional configuration



THL370 Portable Hardness Tester



Advantages

- Largest screen 3 inch , showing all functions and parameters.it is the largest screen of leeb hardness tester in China , easy read and operate.
- The best impact device in China we offer ,stable, ageing resistance,through exam ,we can 2 years long time using ,but others can not.
- Test at any angle, even upside down.
- Wide measuring range. It can measure the hardness of all metallic materials. Direct display of hardness scales HRB, HRC, HV, HB, HS, HL and three types of strength values immediately.
- Seven impact devices are available for special application. Automatically identify the type of impact devices.
- Large capacity memory could store 600 groups (Relative to average times32 ~ 1) information including single measured value, mean value, testing data, impact direction, impact times, material and hardness scale etc.
- Upper and lower limit can be preset. It will alarm automatically when the result value exceeding the limit.

- Battery information indicates the rest capacity of the battery and the charge status.
- User calibration function.
- USB port with the PC humanity multi-functions data proceeding software.
- Original imported high speed thermal printer support the immediate printing function. It can save data permanently.
- NI-MH rechargeable battery as the power source. Charge circuit integrated inside the instrument. Continuous working period of no less than 150 hours (EL off and no printing).
- Auto power off to save energy.
- Excellent after-sale service system for high quality products---3 years' guarantee and all life maintenance. Easy to buy and comfortable to use.

Main Application

- Die cavity of molds
- Bearings and other parts
- Failure analysis of pressure vessel, steam generator and other equipment
- Heavy work piece
- The installed machinery and permanently assembled parts
- Testing surface of a small hollow space
- Material identification in the warehouse of metallic materials
- Rapid testing in large range and multi-measuring areas for large-scale work piece

Technical Specifications

- Measuring range: HLD (170~960) HLD
- Measuring direction: 360 degree.
- Hardness Scale: HL,HB,HRB,HRC,HRA,HV,HS
- Display:3 inch screen ,one of the biggest in China.
- Data memory: 600 groups max. (relative to impact times 32~1)
- Printing paper: width is (57.5±0.5) mm, diameter is 30mm
- Battery pack: 6V NI-MH
- Battery charger: 9V/500mA
- Continuous working period: about 150 hours (With backlight off, no printing)
- Communication interface: USB1.1
- Outline dimensions: 210mm*85mm*35m

Configuration

	No.	Item	Quantity	Remarks
Standard Configuration	1	Main Unit	1	
	2	D type impact device	1	With cable
	3	Standard test block	1	
	4	Cleaning brush (I)	1	

	5	Small support ring	1	
	6	Battery Charger	1	9V 500mA
	7	Paper for printing	1	
	8	Manual	1	
	9	Instrument case	1	
	10	Software	1	
	11	Cable with CD	1	

THL380 Portable Hardness Tester



Advantages

- Largest screen OLED screen import from Taiwan(3 inch),it is the highest brightness display in China showing all functions and parameters, easy read and operate,also can save lots of energy .the largest screen of Leeb hardness tester in China.
- Add four new hardness scales, HRA, HB for D impact device of alloy tool steel; HV for cast aluminum alloy
- Add New user material function, to meet the need of user can test the special material.
- Test at any angle, even upside down.
- Wide measuring range. It can measure the hardness of all metallic materials. Direct display of hardness scales HRB, HRC, HV, HB, HS, HL and three types of strength values immediately.
- Seven impact devices are available for special application. Automatically identify the

type of impact devices.

- Large capacity memory could store 600 groups (Relative to average times $32 \sim 1$) information including single measured value, mean value, testing data, impact direction, impact times, material and hardness scale etc.
- Upper and lower limit can be preset. It will alarm automatically when the result value exceeding the limit.
- Battery information indicates the rest capacity of the battery and the charge status.
- User calibration function.
- USB port with the PC humanity multi-functions data proceeding software.
- Original imported high speed thermal printer support the immediate printing function. It can save data permanently.
- Li rechargeable battery as the power source. Charge circuit integrated inside the instrument. Continuous working period of no less than 200 hours (EL off and no printing).
- Auto power off to save energy.
- Excellent after-sale service system for high quality products---3 years' guarantee and all life maintenance. Easy to buy and comfortable to use.

Standard according including: national standard: GB/T 17394.1-2014; GB/T1172-1999

EU standard: EN ISO 16859-2016

ASTM standard: ASTM A956(2012)

Main Application

- Die cavity of molds
- Bearings and other parts
- Failure analysis of pressure vessel, steam generator and other equipment
- Heavy work piece
- The installed machinery and permanently assembled parts
- Testing surface of a small hollow space
- Material identification in the warehouse of metallic materials
- Rapid testing in large range and multi-measuring areas for large-scale work piece

Technical Specifications

- Measuring range: HLD (170~960) HLD
- Measuring direction: 360°
- Accuracy: +/- 6 HLD
- Hardness Scale: HL、HB、HRB、HRC、HRA、HV、HS
- Display: OLED screen ,3 inch ,one of the biggest screen in China.
- Data memory: 600 groups max. (relative to impact times 32~1)
- Printing paper: width is (57.5±0.5) mm, diameter is 30mm
- Battery pack: 7.4V Li battery
- Battery charger: 9V/1A

- Continuous working period: about 150 hours (With backlight off, no printing)
- Communication interface: USB1.1
- Outline dimensions: 210mm×85mm×35mm

Configuration

	No.	Item	Quantity	Remarks
Standard Configuration	1	Main Unit	1	
	2	D type impact device	1	With cable
	3	Standard test block	1	
	4	Cleaning brush (I)	1	
	5	Small support ring	1	
	6	Battery Charger	1	9V 1A
	7	Paper for printing	1	
	8	Manual	1	
	9	Instrument case	1	

THL500 Portable Hardness Tester



Advantages

- It is the highest brightness display in China showing all functions and parameters, easy read Largest screen Oled screen and operate,also can save lots of energy .the largest screen of Leeb hardness tester in China.
- Two hardness scale dual-display in the screen.
- Measuring direction in 360° and add the auto measure direction to make test easy and precision.
- Add four new hardness scales, HRA, HB for D impact device of alloy tool steel; HV for cast aluminum alloy
- Add New user material function, to meet the need of user can test the special material.
- Test at any angle, even upside down.
- Wide measuring range. It can measure the hardness of all metallic materials. Direct display of hardness scales HRB, HRC, HV, HB, HS, HL and three types of strength values immediately.

- Seven impact devices are available for special application. Automatically identify the type of impact devices.
- Large capacity memory could store 600 groups (Relative to average times $32 \sim 1$) information including single measured value, mean value, testing data, impact direction, impact times, material and hardness scale etc.
- Upper and lower limit can be preset. It will alarm automatically when the result value exceeding the limit.
- Battery information indicates the rest capacity of the battery and the charge status.
- User calibration function.
- USB port with the PC humanity multi-functions data proceeding software.
- Original imported high speed thermal printer support the immediate printing function. It can save data permanently.
- Li rechargeable battery as the power source. Charge circuit integrated inside the instrument. Continuous working period of no less than 200 hours (EL off and no printing).
- Auto power off to save energy.
- Excellent after-sale service system for high quality products---3 years' guarantee and all life maintenance. Easy to buy and comfortable to use.

Main Application

- Die cavity of molds
- Bearings and other parts
- Failure analysis of pressure vessel, steam generator and other equipment
- Heavy work piece
- The installed machinery and permanently assembled parts
- Testing surface of a small hollow space
- Material identification in the warehouse of metallic materials
- Rapid testing in large range and multi-measuring areas for large-scale work piece

Technical Specifications

Measuring range	HLD (170~960) HLD
Measuring direction:	360°
Accuracy:	+/- 4 HLD
Hardness Scale:	HL、HB、HRB、HRC、HRA、HV、HS
Display:	OLED screen ,3 inch ,one of the biggest screen in China.
Data memory	600 groups max. (relative to impact times 32~1)
Printing paper: width	(57.5±0.5) mm, diameter is 30mm
Battery pack:	7.4V Li battery
Battery charger:	9V/500mA
Continuous working period	about 200 hours (With backlight off, no

	printing)
Communication interface	USB2.0
Outline dimensions	225mm×85mm×35mm

Configuration

	No.	Item	Quantity	Remarks
Standard Configuration	1	Main Unit	1	
	2	D type impact device	1	With cable
	3	Standard test block	1	
	4	Cleaning brush (I)	1	
	5	Small support ring	1	
	6	Battery Charger	1	9V 500mA
	7	Paper for printing	1	
	8	Manual	1	
	9	Instrument case	1	

High precision hardness tester THL600



Features

Color display of 3inch screen showing all functions and parameters.

Converts to all common hardness scales (HV,HB, HRC,HRB,HRA,HS).

English displaying and easy and convenient menu operation.

Powerful PC Software available and USB 2.0 interface & with the USB Protective Membrane.

7 types of Impact Device optional, which don't need to be recalibrated when changing them.

Memory of 1200 groups data (impact times:32~1) .Lower limit setting and sound alarm.

Material of "cast steel" is added; HB values can be read out directly when D/DC impact device is used to measure "cast steel" work piece.

Printer be separated from main unit and copies of testing results can be printed as required.

AA battery can easy change and transport.

Inbuilt function of Software Calibration.

With user-defined material curve function, for special materials such as forged steel, rolled steel, alloy steel or special processing metal materials, users can customize the measurement curve according to the actual measurement.

THL600 with The values plotted into the curve, Uniformity will be very obvious.

Standard according including : national standard: GB/T 17394.1-2014; GB/T1172-1999

EU standard: DIN 50156-2007

ASTM standard:ASTM A956(2012)

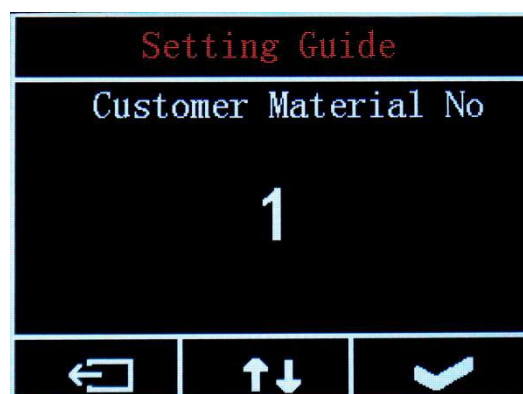
THL600 custom material curve function

Due to the different alloy ratios of alloy materials or due to special hot and cold processing techniques, the elastic modulus of some metal materials is different from that of the same kind of ordinary materials, which results in the testing of such materials, whether it is the national standard conversion table or the European standard. The conversion table cannot accurately convert the different hardness systems. The function of the custom material curve provides a means to adjust the conversion table according to the actual situation, which is conducive to expanding the applicability and accuracy of the instrument product.

Big word & colorful screen



Customer Curve



Graphing Display

Bluetooth Printer

Specifications

Hardness scale	HL, HB, HRB, HRC, HRA, HV, HS
Memory	48~600 groups (impact times: 32~1)
Measuring range	HLD (170~960) See below table 1 and table 2
Accuracy	±4HLD (760±30HLD) error of displayed value
	4HLD (760±30HLD) repeatability of displayed value
Standard Impact Device	D
Optional Impact Devices	DC/D+15/G/C/DL/E
Max. Workpiece Hardness	996HV(For Impact Devices D/DC/DL/D+15/C)
	646HB(For Impact Device G)
Min. Radius of Workpiece	Rmin = 50mm (with special support ring Rmin=10mm)
Min. Workpiece weight	2~5kg on stable support
Min. Workpiece thickness	5mm (Impact Devices D/DC/DL/D+15)
	1mm (Impact Device C)
	10mm (Impact Device G)
Min. thickness of hardened surface	0.8mm
Power	AA battery
Continuous Working time	approx. 100 h (no back light off)
Operating temperature	0~40°C
Relative humidity	≤90%
Overall dimensions	120*60*31mm (main unit)

Standard Configuration

Seq	Name	Qty	Remark
1	Main Unit	1	Standard configuration
2	Impact Device Type D	1	Standard configuration
3	Test Block Type D	1	Standard configuration
4	Cleaning Brush	1	Standard configuration
5	Supporting Ring	1	Standard configuration
6	Communication Cable	1	Standard configuration
7	Manual	1	Standard configuration
8	Carrying Case	1	Standard configuration
9	DataPro Software(USB)	1	Standard configuration
11	Bluetooth Printer	1	Optional configuration



Hardness Tester THL270



Features

OLED display of 128×32 matrix

Converts to all common hardness scales (HL,HV,HB,HRC,HRB,HRA,HS).

Easy to use Menu driven system

With mini USB interface, multiple communication modes are adopted to meet customized requirements of various users

Memory of 600 groups data

Upper and lower limit of hardness can be preset; with alarm

Test value software calibration function

Working voltage: 3.7V rechargeable Li-ion battery

Continuous working period: approx.. 60 hour

The machine also include interface to connect with impact device C, DC, G, D+15, DL, E

Smart and skid proof design

Charging indicator

THL270: integrated with D impact device for normal hardness testing

Standard according including : national standard: GB/T 17394.1-2014; GB/T1172-1999

EU standard: EN ISO 16859-2016

ASTM standard: ASTM A956(2012)

Note: The product uses the international popular streamlined plastic shell, ergonomic design. Surface anti-skid treatment, feel fine, soft, light weight and durable. And has excellent resistance to electromagnetic, anti-vibration and other interference.

Specifications

Technical Specification	
Model	THL270
Impact device	D integrated
Hardness scales	HLD, HB, HRC, HRB, HV, HS
Accuracy	±4HLD(760 ±30HLD)
Memory	600 units
Output	USB
Average Surface Roughness of Work piece	1.6 μ (Ra)
Max. Work piece Hardness	900HLD
Min. radius of Work piece (convex/concave)	Rmin = 50mm (with support ring Rmin= 10mm)
Min. Work piece weight	2~5kg on stable support 0.05~2kg with compact coupling
Min. Work piece thickness coupled	5mm
Min. Thickness of hardened layers	0.8mm
Indentation depth	Impact Devices data
Continuous working time	60(without backlight)
Power	Li battery
Operating temperature	0~40℃
Overall dimensions	155mm×60mm×23mm
Weight	200 g

Main Application

The assembled machinery and permanently installed parts

Die cavity of molds

Heavy work piece

Failure analysis of pressure vessel, steam turbo-generator set and other large equipment

Testing of parts in confined areas or on gear teeth

Bearings and other parts

Material identification of the metal material warehouse

Standard Configuration

	Seq	Name	Qty	Remark
Standard configuration	1	Main unit	1	
	2	Small Supporting ring	1	
	3	Standard Test Block	1	
	4	Cleaning Brush	1	
	5	Charger	1	
	6	Communication Cable	1	
	7	Data Software	1	
	8	Calibration Certificate	1	
	9	Warranty Card	1	
	10	Manual	1	
	11	Carrying Case	1	
Optional Accessories	12	Other Types Impact Device: C, DC, G, D+15, DL	1	
	13	All kinds of special support ring	1	



Hardness Tester THL278



Features

OLED display of 128×32 matrix

Converts to all common hardness scales (HL,HV,HB,HRC,HRB,HRA,HS).

Easy to use Menu driven system

With micro USB interface, multiple communication modes are adopted to meet customized requirements of various users

Memory of 600 groups data

Upper and lower limit of hardness can be preset; with alarm

Test value software calibration function

Working voltage: 3.7V rechargeable Li-Ion battery

Continuous working period: approx.. 60 hour

Bluetooth included, can be connected with printer through Bluetooth

The machine also include interface to connect with impact device C, DC, G, D+15, DL,E probe.

Smart and skid proof design

Charging indicator

THL278: integrated with D impact device for normal hardness testing

Standard according including: national standard: GB/T 17394.1-2014; GB/T1172-1999

EU standard: EN ISO 16859-2016

ASTM standard: ASTM A956(2012)

Note: The product uses the international popular streamlined plastic shell, ergonomic design. Surface anti-skid treatment, feel fine, soft, light weight and durable. And has excellent resistance to electromagnetic, anti-vibration and other interference.

Specifications

Technical Specification	
Model	THL278
Impact device	D integrated
Hardness scales	HLD, HB, HRC, HRB, HV, HS
Accuracy	±4HLD(760 ±30HLD)
Memory	600 units
Output	USB
Average Surface Roughness of Work piece	1.6 μ (Ra)
Max. Work piece Hardness	900HLD
Min. radius of Work piece (convex/concave)	Rmin = 50mm (with support ring Rmin= 10mm)
Min. Work piece weight	2~5kg on stable support 0.05~2kg with compact coupling
Min. Work piece thickness coupled	5mm
Min. Thickness of hardened layers	0.8mm
Indentation depth	Impact Devices data
Continuous working time	60(without backlight)
Power	Li battery
Operating temperature	0~40℃
Overall dimensions	155mm×60mm×23mm
Weight	200 g

Main Application

The assembled machinery and permanently installed parts

Die cavity of molds

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Failure analysis of pressure vessel, steam turbo-generator set and other large equipment

Testing of parts in confined areas or on gear teeth

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Material identification of the metal material warehouse

Standard Configuration

	Seq	Name	Qty	Remark
Standard configuration	1	Main unit	1	
	2	Small Supporting ring	1	
	3	Standard Test Block	1	
	4	Cleaning Brush	1	
	5	Charger	1	
	6	Communication Cable	1	
	7	Data Software	1	
	8	Calibration Certificate	1	
	9	Warranty Card	1	
	10	Manual	1	
	11	Carrying Case	1	
	12	Bluetooth printer	1	
Optional Accessories	13	Other Types Impact Device: C, DC, G, D+15, DL	1	
	14	All kinds of special support ring	1	

