

Portable Hardness Tester IPX-300

Handheld dynamic metal hardness tester with hardness conversion and automatic position setting.

Features

- Dynamic hardness testing: quick and reliable
- Impact device D integrated: no cables
- Wide measuring range in HLD and direct display of converted hardness values in Rockwell HRB, HRC, Vickers HV, Brinell HB and Shore HS
- For most metals (see table)
- Provided testing at any angle, even upside down
- Simple handling and low test expenditure
- High accuracy tolerance of maximum 0.5% on solid parts
- Clear LCD display showing all functions and parameters
- USB data output and internal memory batch of 255 average readings
- Conforming to ASTM A 956



TECHNICAL SPECIFICATION

Material	HLD	HRC	HRB	HB	HV	HS
Steel and cast steel	300-900	20-68	38.4-99.5	80-647	80-940	32.5-99.5
Cold work tool steel	300-640	20.4-67	-	-	80-898	-
Stainless steel	300-800	19.6-62	46.5-100.7	85-655	85-802	-
Grey cast iron	360-650	-	-	93-334	-	-
Nodular cast iron	400-660	-	-	131-387	-	-
Cast aluminium alloys	180-560	-	-	30-159	-	-
Brass	200-540	-	13.5-95.3	40-173	-	-
Bronze	300-700	-	-	60-290	-	-
Copper	200-690	-	-	45-315	-	-

The ranges are stipulated by the application limits of the relevant static procedure.

TECHNICAL SPECIFICATION

Hardness parameter	HLD, HRC, HRB, HV, HB, HS
Tensile strength UTS range (steel only)	sb from 370 to 2000 (106 N/mm ²)
Measuring range / metallic materials	See table
Accuracy	Within ± 0.5% (at HLD = 800) on solid parts
Statistics	Average value
Memory	255 groups, 5 test results per group
Output	USB
Impact device	D (standard) integrated
Workpiece max. hardness value	940HV
Workpiece radius (convex/concave)	R.min = 50mm (with support ring R.min = 10mm)
Workpiece minimum weight	2.5kg on solid support (0.1kg with couplant paste)
Workpiece min. thickness coupled	3mm
Workpiece min. case hardened depth	0.8mm
Indentation depth	See Impact devices data
Power	2 x AAA battery 1.5V (low batt warning) (NOT INCLUDED)
Operating temperature	5 to 50°C
Overall dimensions	135mm x 55mm x 25mm
Weight of main unit	250gr

Standard Delivery

- Main unit with integrated impact device type D
- Test block with HLD value
- Cleaning brush
- Plastic carrying case
- INSPEX certificate
- Installation & user manual

Optional Accessories

- Test blocks UKAS certified in any hardness parameter
- Support rings for convex and concave surfaces
- Software
- Data Cable

Portable Hardness Tester IPX-330

Handheld dynamic metal hardness tester with hardness conversion and automatic position setting.

Features

- Dynamic hardness testing; quick and reliable
- Wide measuring range in HL value and direct display of converted hardness values in Rockwell HRB, HRC, Vickers HV, Brinell HB and Shore HS
- For most metals (see table below)
- Impact device provides testing at any angle, even upside down
- Data output RS-232 and internal memory in a batch of 1250 average readings
- Date and time display
- Lower and upper limits setting with Low-High display judge
- High accuracy $\pm 0.5\%$
- Conforming to ASTM A 956
- Six impact devices are available for special applications
- Works on standard AAA batteries; auto-off after two minutes



TECHNICAL SPECIFICATION

Material	HLD	HRC	HRB	HB	HV	HS
Steel and cast steel	300-900	20-68	38.4-99.5	80-647	80-940	32.5-99.5
Cold work tool steel	300-640	20.4-67	-	-	80-898	-
Stainless steel	300-800	19.6-62	46.5-100.7	85-655	85-802	-
Grey cast iron	360-650	-	-	93-334	-	-
Nodular cast iron	400-660	-	-	131-387	-	-
Cast aluminium alloys	180-560	-	-	30-159	-	-
Brass	200-540	-	13.5-95.3	40-173	-	-
Bronze	300-700	-	-	60-290	-	-
Copper	200-690	-	-	45-315	-	-

The ranges are stipulated by the application limits of the relevant static procedure.

TECHNICAL SPECIFICATION

Hardness parameter	HL, HRC, HRB, HV, HB, HS
Measuring range/metallic materials	See table
Display dimensions	128 x 64 LCD
Display functions	Hardness scale, hardness value, times, average indicator and average value, impact direction, type of impact device connected, memory reference, date, time, battery power consumption
Accuracy	Within $\pm 0.5\%$ (at HLD = 800)
Statistics	Average value
Memory	1250 groups
Output	RS-232 interface
Impact device	D (standard)
Optional impact devices	DL/DC/D+15/G/C/E (see next pages)
Workpiece max. hardness value	940HV
Workpiece radius (convex/concave)	R,min = 50mm (with support ring R,min = 10mm)
Workpiece minimum weight	2kg on solid support (0.1kg with couplant paste)
Workpiece min. thickness coupled	3mm (except with impact device G: 10mm)
Workpiece min. case hardened depth	0.8mm
Indentation depth	See Impact devices data
Power	2 AAA batteries 1.5V (not included)
Operating temperature	5 to 50°C (impact device: 120°C max. briefly)
Overall dimensions	108mm x 62mm x 25mm
Weight of main unit	180gr (including impact device and printer)



Standard Delivery

- Main unit
- Impact device type D
- Test block HLD value
- Cleaning brush
- INSPEX certificate
- Manual
- Plastic carrying case

Optional Accessories

- Special impact devices
- Test blocks UKAS certified in any hardness parameter
- Support rings for convex and concave surfaces
- Mini-printer with cable
- Software
- Data cable

Portable Hardness Tester IPX-340

Portable Hardness Tester with in-built thermal printer.

Features

- Advanced Leeb hardness tester with in-built thermal printer
- Large LCD, showing all functions and parameters
- Direct display of hardness scales HRB, HRC, HV, HB, HS, HL
- Automatic recognition of Impact devices
- Upper and lower limit with sound alarm
- Test at any angle, even upside down
- Six impact devices are available for special application
- Battery low indication and sound alarm
- Rechargeable Li battery, intelligent charging



TECHNICAL SPECIFICATION

Hardness scale	HL, HRC, HRB, HRA, HV, HB, HS
Memory	373 ~ 2688 group (Impact times:32 ~ 1)
Measuring range	HLD(170 ~ 960), HRA(59 ~ 85), HRB(13 ~ 100), HRC(20 ~ 68), HB(19 ~ 651), HV(80 ~ 967), HS(30 ~ 100)
Tensile strength U.T.S. range	374 ~ 2652 MPa
Accuracy	±6HLD (760±30HLD) error of displayed value 6HLD (760±30HLD) repeatability of displayed value
Standard Impact Device	D Type
Data Interface	USB 2.0
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 (convex/concave)	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 layers	0.8mm
Power	Rechargeable Li Battery, 7.4V, Li(1500mAh)
Continuous Working time	About 300h, (without backlight)
Charging time	4 ~ 5 hours
Operating temperature	0 ~ 40°C
Humidity	≤ 90%
Overall dimensions	212 x 80 x 35mm
Weight	320g

Standard Delivery

- Main unit
- In-built Printer
- Impact Device Type D
- Test block HLD
- Charger
- Brush
- Connecting cable
- INSPEX Certificate
- Instruction manual
- Data view Software

Optional Accessories

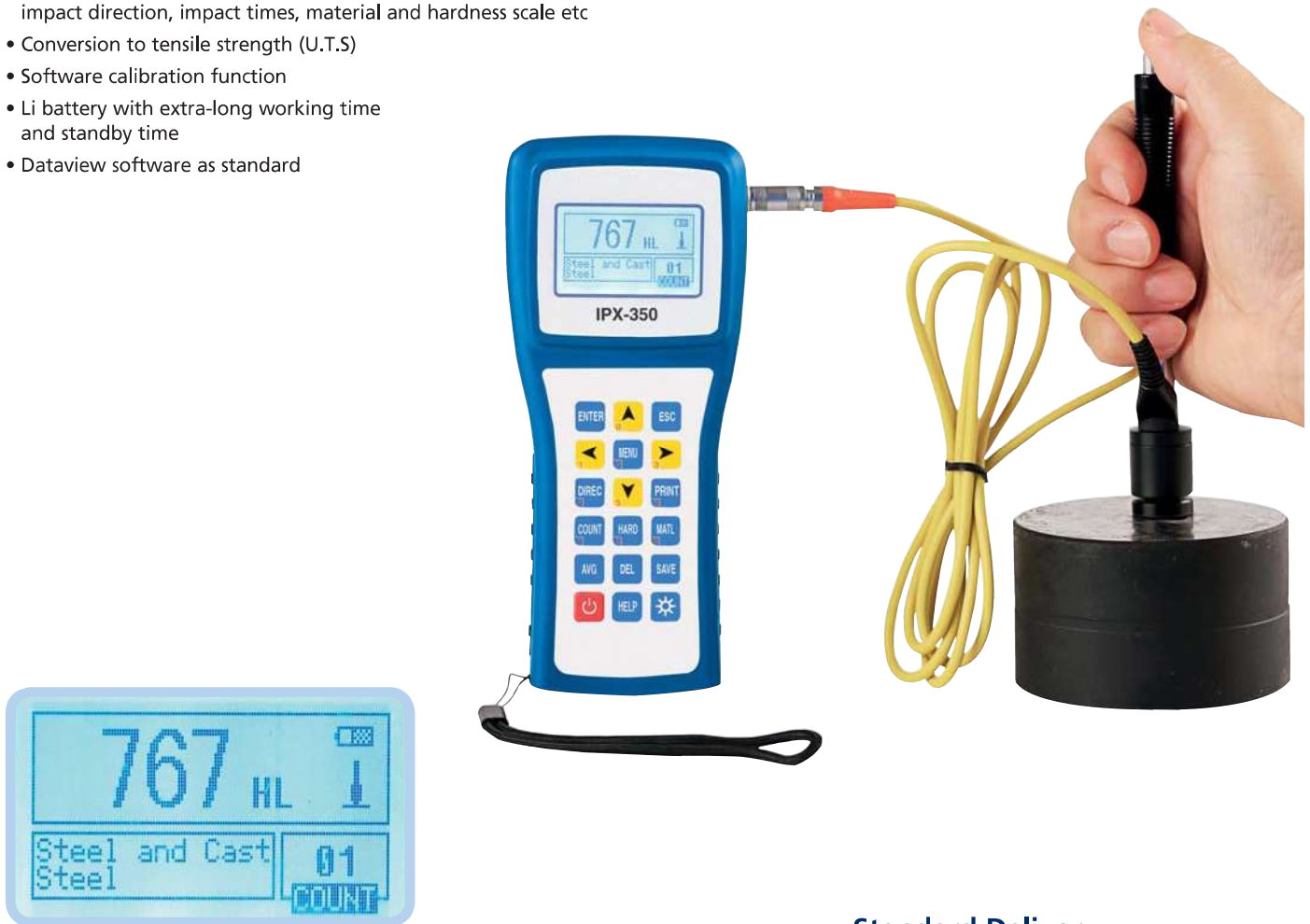
- Optional impact devices
- Optional support rings
- Other test blocks

Portable Hardness Tester IPX-350

The IPX-350 portable hardness tester measures a wide measuring range in HL value and directly displays converted hardness in HRC, HRB, HRA, HB, HV and HS.

Features

- Large LED display with backlight display
- Seven impact devices are available for special applications
- Automatically identifies the impact type without re-calibration
- Large memory 48~350 groups (impact average times 32~1)
- Display including single measured value, mean value, testing date, impact direction, impact times, material and hardness scale etc
- Conversion to tensile strength (U.T.S)
- Software calibration function
- Li battery with extra-long working time and standby time
- Dataview software as standard



TECHNICAL SPECIFICATION

Hardness scale	HL, HRC, HRB, HRA, HV, HB, HS
Display	Dot matrix LCD 128x64 dots
Memory	Data memory: 0~300 groups (impact times: 32~1)
Measuring range	170~960 HLD
Standard Impact Device	360°
Optional Impact Devices	DC, D+15, G, C, DL
Data storage	350 groups maxim, relative to impact times 32~1
Power	3.7 V Li battery
Continuous Working period	100h (without backlight)
Data Output	Micro-USB
Operating temperature	0-40°C
Humidity	≤90%
Dimensions	179 x 77 x 35mm
Weight approx.	175g (main unit)

Standard Delivery

- Main uni.
- D type impact device
- Support ring
- Cleaning brush
- Test block HLD value
- Charger
- Communication cable
- INSPEX Certificate

Optional Accessories

- Special impact devices
- Support rings for convex and concave surfaces
- High, medium, low HLD value test block

Portable Hardness Tester IPX-360

Features

- Colour display (320x240 TFT) with adjustable backlight
- Hardness scales, HRA, HB for D impact device of alloy tool steel; HV for cast aluminium alloy
- New user material function, user can define own test range.
- Converts to all common hardness scales (HV, HB, HRC, HRB, HRA, HS)
- USB interface
- Seven impact devices are available for special applications
- Max 600 groups (impact times:32~1)
- Upper and lower limit with sound alarm
- Large LED display with backlight display
- Software calibration function
- Rechargeable Li battery with extra-long working time (approx. 200 h)
- Dataview software as standard



TECHNICAL SPECIFICATION

Hardness scale	HL, HB, HRB, HRC, HRA, HV, HS
Memory	Memory: 0~300 groups (impact times: 32~1)
Measuring range	170~960 HLD
Standard Impact Device	D Type
Optional Impact Devices	DC, D+15, G, C, DL
Power	3.7 V rechargeable Li battery
Continuous Working time approx.	100 h (without back light on)
Display	LCD, Colour display (320x240 TFT) with backlight.
Operating temperature	-10-40°C
Humidity	≤90%
Dimensions	154 x 82 x 35mm (main unit)
Weight approx.	175g (main unit)

Standard Delivery

- Main uni.
- D type impact device
- Support ring
- Cleaning brush
- Test block HLD value
- Charger
- Communication cable
- INSPEX Certificate

Optional Accessories

- Special impact devices
- Support rings for convex and concave surfaces
- High, medium, low HLD value test block