



- Basic Rockwell tester
- Direct analogue reading of Rockwell scales HRC, HRA and HRB



MODEL ISH-NR150 ROCKWELL HARDNESS TESTER

Technical specification

Measuring range	20-88HRA, 20-100HRB, 20-70HRC
Test loads	10kgf preload, 60, 100, 150kgf total load
Display	dial indicator
Hardness resolution	0.5 of Rockwell unit
Max. test height	170mm/6.7"
Max. throat	165mm/6.5"
Dimension	520×240×700mm
Weight	80kg/176lbs

Standard delivery

Main unit	1pc
Large flat anvil	1pc
Small flat anvil	1pc
V-type anvil	1pc
Diamond Rockwell indenter	1pc
Rockwell ball Φ 1.5875mm indenter	1pc
Spare ball Φ 1.5875mm	5pcs
Rockwell test block HRB85-95	1pc
Rockwell test block HRC60-70	1pc
Rockwell test block HRC20-30	1pc

MODEL ISH-NMR150

MOTORIZED ROCKWELL HARDNESS TESTER

Technical specification

Measuring range	20-88HRA, 20-100HRB, 20-70HRC
Test force	10kgf preload 60, 100, 150kgf total load
Display	dial indicator
Load control	automatic (loading/dwell/unloading)
Hardness resolution	0.5 of Rockwell unit
Max. test height	170mm/6.7"
Max. throat	165mm/6.5"
Power supply	AC 220V 50Hz (standard) AC 110V 60Hz (option)
Dimension	520×240×700mm
Weight	80kg/176lbs

Standard delivery

Main unit	1pc
Large flat anvil	1pc
Small flat anvil	1pc
V-type anvil	1pc
Diamond Rockwell indenter	1pc
Rockwell ball $\Phi 1.5875$ mm indenter	1pc
Spare ball $\Phi 1.5875$ mm	5pcs
Rockwell test block HRB85-95	1pc
Rockwell test block HRC60-70	1pc
Rockwell test block HRC20-30	1pc
Fuse (1A)	2pcs



MODEL ISH-DR150

DIGITAL ROCKWELL HARDNESS TESTER

- Digital display with hardness value and Rockwell scale (HRB, HRC, HRA)
- Built-in printer

Technical specification

Measuring range	20-88HRA, 20-100HRB, 20-70HRC
Test loads	10kgf preload, 60, 100, 150kgf total load
Resolution	0.1HR
Dwell time	1~30s
Data output	built-in printer and RS232C
Max. test height	170mm/6.9"
Max. throat	130mm/5.1"
Power supply	AC 220V, 50Hz (standard) AC 110V, 60Hz (option)
Dimension	510×212×730mm
Weight	85kg/187lbs

Standard delivery

Main unit	1pc
Built-in Printer	1pc
Ball indenter Ø1.5875mm	1pc
Spare ball Ø1.5875mm	5pcs
Diamond Rockwell indenter	1pc
Large flat anvil	1pc
Small flat anvil	1pc
V-type anvil	1pc
Rockwell test block	5pcs
Fuse (2A)	2pcs
RS232C cable	1pc
Anti-dust cover	1pc



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MODEL ISH-RSR150

DIGITAL ROCKWELL AND SUPERFICIAL ROCKWELL HARDNESS TESTER

- Digital LED reading of 12 regular Rockwell scales
- Conversion to: HB, HV, HK
- Menu operated LCD screen with many functions such as max. value, average value, min. value, lighting intensity, dwell time, test load, hardness
- Built-in printer
- Easy load force selection by dial knob



Technical specification

Test loads	3, 10kgf preload 15, 30, 45, 60, 100, 150kgf total load
Rockwell scales	HRA, B, C, D, E, F, G, H, K and HR15N.T, 30N.T, 45N.T
Load control	automatic (loading/dwell/unloading)
Display	back light LCD screen
Data output	built-in printer and RS232C
Max. test height	180mm/7.1"
Max. throat	160mm/6.3"
Power supply	AC 220V 50Hz (standard) AC 110V 60Hz (option)
Dimension	551×260×800mm
Weight	67kg/147lbs

Standard delivery

Main unit	1pc
Diamond Rockwell indenter	1pc
Rockwell ball indenter Ø1.5875mm	1pc
Large flat anvil	1pc
Small flat anvil	1pc
V-type anvil	1pc
Rockwell test block HRC (high and low)	1pc each
Rockwell test block HRB, HR30N, HR30T	1pc each
Built-in printer	1pc
Fuse (2A)	2pcs
RS232C cable	1pc

MODEL ISH-HAB3000

DIGITAL BRINELL HARDNESS TESTER

- Read the size of indentation from microscope, find the corresponding hardness value from the chart
- No weights, electronic auto loading



Technical specification

Measuring range	8~650HB
Test force	62.5, 100, 125, 187.5, 250, 500, 750, 1000, 1500, 3000kgf
Test cycle	automatic
Max. test height	225mm/8.9"
Max. throat	135mm/5.3"
Microscope	magnification 20X, graduation 0.005mm
Power supply	AC 220V, 50Hz (standard) AC 110V 60Hz (option)
Dimension	540×200×750mm
Weight	130kg/286lbs

Standard delivery

Main unit	1pc
Microscope	1pc
Large flat anvil	1pc
Small flat anvil	1pc
V-type anvil	1pc
Steel ball indenter (Ø2.5mm, Ø5mm, Ø10mm)	1pc each
Spare steel ball (Ø2.5mm, Ø5mm, 10mm)	1pc each
Brinell test block	2pcs
Fuse	3pcs
Screwdriver	2pcs
Anti-dust cover	1pc

MODEL ISH-AB3000

DIGITAL BRINELL HARDNESS TESTER

ISH-AB3000					
Digital Brinell Hardness Tester					
Measurement			Loading		
D1: 0.818mm			F: 0.6		
D2: 0.818mm			Range		
115.86HBW			31.8 -- 218 HBW		
HRB		No. 01	2008/06/10_17:12:02		
Loadline	Indenter	Dwell	Light	Change	Time
62.5	2.5 mm	85 S	38 %	HRB	VEAR

- Find the edge of indentation from the microscope, directly read the hardness value from screen
- Can be automatically converted to 16 other hardness scales
- Test result can be printed in the built-in printer or transferred through RS232C data output for storage or printing
- No weights, electronic auto loading



Technical specification

Measuring range	8~650HBW
Test force	62.5, 100, 125, 187.5, 250, 500, 750, 1000, 1500, 3000kgf
Test cycle	automatic
Max. test height	225mm/8.9"
Max. throat	135mm/5.3"
Micrometer eyepiece	magnification 20X, graduation 0.00125mm
Data output	built-in printer and RS232C
Power supply	AC 220V 50Hz (standard) AC110V 60Hz (option)
Dimension	560×220×800mm
Weight	130kg/286lbs

Standard delivery

Main unit	1pc
Micrometer eyepiece	1pc
RS232C cable	1pc
Built-in printer	1pc
Large flat anvil	1pc
Small flat anvil	1pc
V-type anvil	1pc
Steel ball indenter (Φ2.5mm, Φ5mm, Φ10mm)	1pc each
Spare steel ball (Φ2.5mm, Φ5mm, Φ10mm)	1pc each
Brinell test block	2pcs
Fuse	3pcs
Screwdriver	2pcs
Anti-dust cover	1pc

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MODEL ISH-PB

PORTABLE BRINELL HARDNESS TESTER

Technical specification

Measuring range	100~400HBS
Impact capacity	4.9J
Indenter	Ø10mm steel ball
Dimension	Ø55×370mm
Weight	3.3kg/7.3lbs

Standard delivery

Main unit	1pc
Brinell test block	1pc
Ø10mm spare steel ball	3pcs
20X readout microscope	1pc
Wrench	2pcs

MODEL ISH-DV1000

DIGITAL MICRO HARDNESS TESTER

Technical specification

Measuring range	5~2500HV
Test load	0.01, 0.025, 0.05, 0.1, 0.2, 0.3, 0.5, 1kgf
Vickers scales	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1
Load control	Automatic (loading/dwell/unloading)
Load duration	5-60s (adjustable)
Test force selection	dial
Objective	10X, 40X
Eyepiece	10X
Total magnification	100X (for observation) 400X (for measuring)
Microscope resolution	0.0625μm
Max. test height	65mm/2.6"
Max. throat	85mm/3.3"
X-Y stage	dimensions: 100×100mm (3.9×3.9") travel range: 25×25mm (1.0×1.0") reading: 0.01mm
Power supply	AC 220V 50Hz (standard) AC 110V 60Hz (option)
Dimension	405×290×480mm
Weight	25kg/55lbs

Standard delivery

Main unit	1pc
Micro Vickers indenter	1pc
Micro Vickers test block (high, medium)	1pc each
Objective 10X, 40X	1pc each
10X eyepiece	1pc
X-Y stage, slice holder, cylinder holder, vice	1pc each
Built-in printer	1pc
Level	1pc
Bulb (6V/12W)	2pcs
Fuse (1A, 2A)	2pcs each
Adjustable feet	4pcs

- Measuring microscope with digital encoder reading
- Built-in printer

←INSIZE→



MODEL ISH-TDV1000

AUTO-TURRET DIGITAL MICRO HARDNESS TESTER

Technical specification

Measuring range	5HV~3000HV
Test load	0.01, 0.025, 0.05, 0.1, 0.2, 0.3, 0.5, 1kgf
Vickers scales	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1
Load control	automatic (loading/dwell/unloading)
Load duration	5-60s (12 steps)
Test force selection	dial
Objective	10X, 40X
Eyepiece	15X
Total magnification	150X (for observation) 600X (for measuring)
Resolution	0.025µm
Max. test height	85mm/3.3"
Max. throat	85mm/3.3"
X-Y stage	dimensions: 100×100mm (3.9×3.9") travel range: 25×25mm (1.0×1.0") reading: 0.01mm
Measuring mode	read hardness value from display
Power supply	AC 220V 50Hz (standard) AC 110V 60Hz (option) AC 220V 60Hz (option)
Dimension	540×500×640mm
Weight	45kg/99lbs

Standard delivery

Main unit	1pc
Micro Vickers indenter	1pc
Micro Vickers test block (700HV1, 400HV0.2)	1pc each
X-Y stage, slice holder, cylinder holder, vice	1pc each
10X, 40X objective	1pc each
15X digital eyepiece	1pc
Level	1pc
Built-in printer	1pc
Spare bulb	2pcs
Spare fuse	2pcs
Camera adaptor	1pc
Screwdriver	1pc
Wrench	2pcs

Optional accessories

Knoop indenter
Digital camera



←IN SIZE→



MODEL ISH-TV1000 AUTO-TURRET MICROHARDNESS TESTER

Technical specification

Measuring range	5HV~3000HV
Test load	0.01, 0.025, 0.05, 0.1, 0.2, 0.3, 0.5, 1kgf
Vickers scales	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1
Load control	automatic (loading/dwell/unloading)
Load duration	5-60s (12 steps)
Test force selection	dial
Objective	10X, 40X
Eyepiece	15X
Total magnification	150X (for observation) 600X (for measuring)
Resolution	0.025μm
Max. test height	85mm/3.3"
Max. throat	85mm/3.3"
X-Y stage	dimensions: 100×100mm (3.9×3.9") travel range: 25×25mm (1.0×1.0") reading: 0.01mm
Measuring mode	read hardness value from table
Power supply	AC 220V 50Hz (standard) AC 110V 60Hz (option) AC 220V 60Hz (option)
Dimension	540×500×640mm
Weight	45kg/99lbs

Standard delivery

Main unit	1pc
Micro Vickers indenter	1pc
Micro Vickers test block (700HV1, 400HV0.2)	1pc each
X-Y stage, slice holder, cylinder holder, vice	1pc each
10X, 40X objective	1pc each
15X digital eyepiece	1pc
Level	1pc
Built-in printer	1pc
Spare bulb	2pcs
Spare fuse	2pcs
Camera adaptor	1pc
Screwdriver	1pc
Wrench	2pcs

Optional accessories

Knoop indenter	
Digital camera	

DIGITAL VICKERS HARDNESS TESTER



- Adjustable brightness of indentation
- Electricity loss protection device by lithium battery
- Conversion to hardness scales Rockwell, Brinell
- Built-in printer and RS232

Technical specification

Model	ISH-DV10	ISH-DV50
Measuring range	8HV0.3~2500HV10	5HV1~2500HV50
Test force	0.3, 0.5, 1.0, 3.0, 5.0, 10.0kgf	1.0, 5.0, 10.0, 20.0, 30.0, 50.0kgf
Load control	automatic (loading/dwell/unloading)	
Display	LCD	
Load duration	5-60sec	
Magnification of microscope	for measurement: 200X (objective 20X/eyepiece 10X)	for measurement: 100X (objective 10X/eyepiece 10X)
	for observation: 100X (objective 10X/eyepiece 10X)	
Resolution of microscope	0.0625μm	0.25μm
Max. test height	160mm/6.3"	
Max. throat	135mm/5.3"	
Power supply	AC 220V, 50Hz (standard)	
	AC 110V, 60Hz (option)	
Dimension	650×540×270mm	
Weight	40kg/88lbs	45kg/99lbs

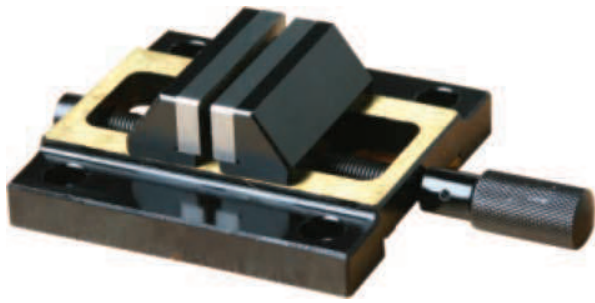
Standard delivery

Model	ISH-DV10	ISH-DV50
Main unit	1pc	1pc
Anvil (large flat, medium flat, V-type)	1pc each	1pc each
Vickers test block (high, medium)	2pcs	2pcs
Objective	2pcs (10X, 20X)	1pc (10X)
Eyepiece 10X	1pc	1pc
Built-in printer	1pc	1pc
Spare bulb	2pcs	2pcs
Adjustable feet	4pcs	4pcs

Optional accessories

Slice holder
Cylinder holder
Vice
X-Y stage
Level
Knoop indenter
16X micrometer eyepiece
6.8 inch liquid crystal display

ACCESSORY FOR DIGITAL VICKERS HARDNESS TESTER



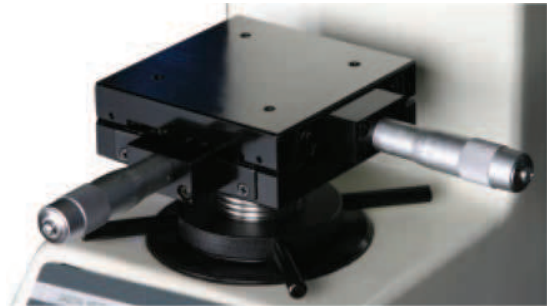
VICE



SLICE HOLDER



CYLINDER HOLDER



X-Y STAGE

MODEL ISH-BRV

BRINELL/ROCKWELL/VICKERS HARDNESS TESTER

Technical specification

Rockwell test load	10kgf preload, 60, 100, 150kgf total load
Brinell test load	31.2, 62.5, 187.6kgf
Vickers test load	30, 100kgf
Magnification of microscope	37.5X, 75X
Max. test height	200mm/7.9"
Max. throat	200mm/7.9"
Power supply	AC 220V 50Hz (standard) AC 110V 60Hz (option)
Dimension	546×300×767mm
Weight	90kg/198lbs

Standard delivery

Main unit	1pc	Vickers test block	1pc
Diamond Rockwell indenter	1pc	Weight	5pcs
Diamond Vickers indenter	1pc	Microscope seating	1pc
Ø1.5875mm, Ø2.5mm, Ø5mm ball indenter	1pc each	15X micrometer eyepiece	1pc
Large anvil	1pc	2.5X, 5X objective	1pc each
Small anvil	1pc	Baffle anvil	1set
V-anvil	1pc	Taper anvil	1pc
Rockwell test block HRC (high, low)	1pc each	Fuse (0.5A)	2pcs
Rockwell test block HRB	1pc	Bulb (6V/15W)	2pcs
Brinell test block	1pc	Bulb (6V/5W)	4pcs
		Anti-dust cover	1pc

←INSIZE→



Model ISH-PHA

Portable Hardness Tester

- Large LCD display with backlight
- Communicate with printer via wireless IR
- Low and high limits setting with judgment
- Based on HL scale, converted to other hardness scales (HV, HB, HRC, HRB, HS) and tensile strength(Mpa)
- Conforms to the standard ASTM A956-02



Specifications

Resolution	1HL, 1HV, 1HB, 0.1HRC, 0.1HRB, 1HS, 1MPa
Accuracy	±6HL (HL=800)
Display	hardness HL, conversion hardness, impact direction, test times, average value, material, date
Output	wireless IR and USB
Workpiece	min. weight: 5kg min. thickness: 5mm min. thickness of layers: 0.8mm min. radius of curved surface: 11mm
Power supply	three AAA alkaline batteries
Working temperature	0°C-50°C(32°F -122°F)
Dimension	150 × 80× 24mm (5.9×3.1×0.9 inch)
Weight	200g/7.1oz

Standard delivery

Main unit	1pc
Impact device D	1pc
Printer	1pc
Standard test block	1pc
Cleaning brush	1pc
Small supporting ring	1pc
AC/DC adapter	1pc

Material and range of impact device D

Material	HL	HV	HB	HRC	HRB	HS	Tensile strength
Steel & cast steel	300-910	83-976	140-651	19.8-68.5	59.6-99.6	26.4-99.5	375-2639
Tool steel	300-640	80-900		21-67			
Stainless steel	300-800	85-802	85-655	20-62	47-102		
Cast iron	360-660		140-387				
Cast aluminum alloy	170-560		30-159				
Brass	200-550		40-173		13.5-95.3		
Bronze	300-700		60-290				
Copper	200-690		45-315				

Model ISH-SPHA

Portable Hardness Tester

- Touch screen, large LCD display with backlight
- Communicate with printer via wireless IR
- User profiles for fast change of all settings
- Large memory with on-screen review of data
- Low and high limits setting with judgment
- Based on HL scale, converted to other hardness scales (HV, HB, HRC, HRB, HS) and tensile strength(Mpa)
- Conforms to the standard ASTM A956-02



Specifications

Resolution	1HL, 1HV, 1HB, 0.1HRC, 0.1HRB, 1HS, 1MPa
Accuracy	±6HL (HL=800)
Display	hardness HL, conversion hardness, impact direction, test times, average value, difference of max. and min., material, impact device, time, battery power
Output	wireless IR and USB
Workpiece	min. weight: 5kg min. thickness: 5mm min. thickness of layers: 0.8mm min. radius of curved surface: 11mm
Power supply	built-in 3.7V rechargeable lithium-battery
Working temperature	0°C-50°C(32°F -122°F)
Dimension	135×83×24mm(5.3× 3.2 ×0.9 inch)
Weight	230g/8.1oz

Standard delivery

Main unit	1pc
Impact device D	1pc
Printer	1pc
Standard test block	1pc
Cleaning brush	1pc

Small supporting ring	1pc
AC/DC adapter	1pc

Optional accessories

Impact device G	
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Material and range of impact device D

Material	HL	HV	HB	HRC	HRB	HS	Tensile strength
Steel & cast steel	300-910	83-976	140-651	19.8-68.5	59.6-99.6	26.4-99.5	375-2639
Tool steel	300-640	80-900		21-67			
Stainless steel	300-800	85-802	85-655	20-62	47-102		
Cast iron	360-660		140-387				
Cast aluminum alloy	170-560		30-159				
Brass	200-550		40-173		13.5-95.3		
Bronze	300-700		60-290				
Copper	200-690		45-315				



ISH-R1015



ISH-R14530



ISH-R2550



ISH-R1113



ISH-R12517



ISH-R16530



ISH-SR1113



ISH-SR12517



ISH-SR16530



ISH-SR1015



ISH-SR14530



ISH-RUN

SUPPORT RINGS FOR PORTABLE HARDNESS TESTER

Technical specification

Model	Sketch	Workpiece (mm)
ISH-R1015		cylindrical outside surface R10-R15
ISH-R14530		cylindrical outside surface R14.5-R30
ISH-R2550		cylindrical outside surface R25-R50
ISH-R1113		cylindrical inside surface R11-R13
ISH-R12517		cylindrical inside surface R12.5-R17
ISH-R16530		cylindrical inside surface R16.5-R30
ISH-SR1015		spherical outside surface SR10-SR15
ISH-SR14530		spherical outside surface SR14.5-SR30
ISH-SR1113		spherical inside surface SR11-SR13
ISH-SR12517		spherical inside surface SR12.5-SR17
ISH-SR16530		spherical inside surface SR16.5-SR30
ISH-RUN		cylindrical outside surface, radius adjustable >R10



ISH-SA



ISH-SD

SHORE DUROMETER

Technical specification

Model	ISH-SA	ISH-SD
Test material	soft plastic, rubber, leather, etc.	hard plastic, hard rubber, etc.
Measuring range	0~100HA	0~100HD
Stroke	2.5mm	
Tip dimension	Ø0.79mm	SR0.1mm
Dimension	115×60×25mm	
Net weight	0.5 kg/1.1lbs	



MODEL ISH-SC MICROPOROUS MATERIAL SHORE DUROMETER

Technical specification

Test material	foam, sponge, etc.
Measuring range	0~100HW
Stroke	2.5mm
Tip dimension	SR2.5mm
Dimension	115×60×25mm
Net weight	0.5 kg/1.1lbs





ISH-STAC

Durometer is not included

DUROMETER TEST STAND

- Operating stand for shore durometers
- Convenient and accurate way for repetitive test of hardness

Technical specification

Model	ISH-STAC	ISH-STD
For durometer	ISH-SA, ISH-SC	ISH-SD
Table	Ø100mm/4"	Ø100mm/4"
Mass of weight	1kg/2.2lbs	5kg/11lbs



DIGITAL SHORE HARDNESS TESTER

- Maximum value tracking
- Average value from maximum 9 test results
- With RS232C interface
- Automatic power off

Technical specification

Model	ISH-PS100A	ISH-PS100D	ISH-PS100C
Test material	soft plastic, rubber, leather, etc.	hard plastic, hard rubber, etc.	foam, etc.
Measuring range	0-100HA	0-100HD	0-100HC
Resolution	0.01HA	0.01HD	0.01HC
Accuracy	±1%		
Working condition	0°C-50°C (32°F-122°F)		
Power supply	4×1.5V AAA batteries		
Dimension	162×65×28mm		
Weight	173g/6.1oz	160g/5.6oz	160g/5.6oz

Standard accessories

Main unit	1pc
Test block	1pc
Battery	4pcs

Optional accessories

Cable & software for RS232C