# **MANUAL ROCKWELL HARDNESS TESTER**





- Manual loading control
- ◆ Economic type
- With manufacturer inspection certificate



Small flat anvil



Large flat anvil



V-type anvil



#### **SPECIFICATION**

Loadforce	10kgf(98N)
Total load force	60kgf (588N), 100kgf (980N), 150kgf (1471N)
Stage elevation	manual
Loading control	manual
Graduation	0.5HR
Max. test height	155mm
Max. throat	130mm
Dimension	460×180×620mm
Weight	65kg

Main unit	1pc
Ø1.5875mm ball carbide indenter	1pc
Diamond indenter	1pc
Flatanvil	2pcs
V-type anvil	1pc
Rockwelltestblock	5pcs
Screw driver	2pcs

# HR150B

## **MANUAL ROCKWELL HARDNESS TESTER**



- ◆ Manual loading control
- With manufacturer inspection certificate



Small flat anvil



Large flat anvil



V-type anvil



#### **SPECIFICATION**

SPECIFICATION	
Loadforce	10kgf(98N)
Total load force	60kgf (588N), 100kgf (980N), 150kgf (1471N)
Stage elevation	manual
Loading control	manual
Graduation	1HR
Max. test height	170mm
Max. throat	160mm
Dimension	487×265×726mm
Weight	73kg

INCESSED ACCESSORIES	
Main unit	1pc
Ø1.5875mm ball carbide indenter	1pc
Diamond indenter	1pc
Flatanvil	2pcs
V-type anvil	1pc
Rockwelltestblock	3pcs
Dustproof cover	1pc

# HR150A

# **DIGITAL ROCKWELL HARDNESS TESTER**

- Manual loading control
- The hardness scale can be converted to HV and HB
- With USB interface, for transferring data
- With manufacturer inspection certificate



Small flat anvil



Large flat anvil



V-type anvil



PR100 printer (optional)





#### **SPECIFICATION**

Load force	10kgf(98N)
Total load force	60kgf (588N), 100kgf (980N), 150kgf (1471N)
Stage elevation	manual
Loading control	manual
Resolution	0.1HR
Max. test height	170mm
Max.throat	160mm
Dimension	487×265×726mm
Weight	73kg

#### **INCLUDED ACCESSORIES**

Main unit	1рс
Ø1.5875mm ball carbide indenter	1pc
Diamond indenter	1pc
Flatanvil	2pcs
V-type anvil	1pc
Rockwell test block	3pcs
Dustproof cover	1рс

# HR150C

# **DIGITAL ROCKWELL HARDNESS TESTER**





- Motorized loading control
- ◆ The hardness scale can be converted to HV and HB
- ◆ With USB interface, for transferring data
- ◆ With manufacturer inspection certificate





Small flat anvil



Large flat anvil



V-type anvil



PR100 printer (optional)



#### SPECIFICATION

5. 2511 1571 1511	
Load force	10kgf(98N)
Total load force	60kgf (588N), 100kgf (980N), 150kgf (1471N)
Stage elevation	manual
Loading control	auto
Loading time	1-99s
Resolution	0.1HR
Max. test height	170mm
Max. throat	160mm
Dimension	487×265×726mm
Weight	73kg

#### **INCLUDED ACCESSORIES**

Main unit	1pc
Ø1.5875mm ball carbide indenter	1pc
Diamond indenter	1pc
Flatanvil	2pcs
V-type anvil	1pc
Rockwell test block	3pcs
Dustproofcover	1pc

Vireless printer	PR100
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## **MOTORIZED ROCKWELL HARDNESS TESTER**



- ◆ Motorized loading control
- ◆ Economic type
- With manufacturer inspection certificate



Small flat anvil



Large flat anvil



V-type anvil



#### **SPECIFICATION**

Load force	10kgf(98N)
Total load force	60kgf (588N), 100kgf (980N), 150kgf (1471N)
Stage elevation	manual
Loading control	auto
Loading time	1-99s
Resolution	0.5HR
Max. test height	200mm
Max. throat	130mm
Dimension	470×230×680mm
Weight	75kg

Main unit	1pc
Ø1.5875mm ball carbide indenter	1pc
Diamond indenter	1pc
Flatanvil	2pcs
V-type anvil	1pc
Rockwell test block	5pcs

# HAKUNES

# HR150CNC

# AUTOMATIC ROCKWELL/SUPERFICIAL ROCKWELL HARDNESS TESTER



- $\blacklozenge \ \, \text{The stage is fixed, and indenter moves up and down}$
- Motorized loading control
- ◆ High-precision closed loop force loading system
- ◆ The hardness scale can be converted to HV and HB
- ♦ With touch screen, easy to operate
- With wireless printer
- With manufacturer inspection certificate



#### **SPECIFICATION**

SPECIFICATION		
Туре	Rockwell Superficial Rockwell	
Load force	10kgf (98N) 3kgf (29.4N)	
Total load force	60kgf (588N), 100kgf (980N), 150kgf (1471N)	15kgf(147.1N), 30kgf(294.2N), 45kgf(441.3N)
Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG	HR15N, HR30N, HR45N, HR15T, HR30T, HR45T,
Indenterelevation	auto	
Loading control	auto	
Loading time	1-60s	
Resolution	0.1HR	
Max. test height	280mm	
Max. throat	170mm	
Dimension	400×855×620mm	
Weight	80kg	

Mainunit	1pc
Ø1.5875mm ball carbide indenter	1pc
Diamond indenter	1pc
Small flat anvil	1pc
V-type anvil	1pc
HRA test block	1pc
HRB test block	1pc

HRC test block	3pcs
HR15N test block	1pc
HR30N test block	2pcs
HR45N test block	1pc
Ø1.5875mm ball	5pcs
Wireless printer	1pc

# HRSS150C

#### **DIGITAL ROCKWELL/SUPERFICIAL ROCKWELL HARDNESS TESTER**



- ◆ Motorized loading control
- ◆ High-precision closed loop force loading system
- ◆ The hardness scale can be converted to HV and HB
- ♦ With touch screen, easy to operate
- With printer
- With manufacturer inspection certificate



#### **SPECIFICATION**

OF ECII ICATION		
Туре	Rockwell Superficial Rockwell	
Load force	10kgf (98N) 3kgf (29.4N)	
Total load force	60kgf (588N), 100kgf (980N), 150kgf (1471N)	15kgf(147.1N), 30kgf(294.2N), 45kgf(441.3N)
Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG	HR15N, HR30N, HR45N, HR15T, HR30T, HR45T,
Stage elevation	manual	
Loading control	auto	
Loading time	1-60s	
Resolution	0.1HR	
Max. test height	200mm	
Max.throat	160mm	
Dimension	510×290×730mm	
Weight	95kg	

Main unit	1pc
Ø1.5875mm ball carbide indenter	1pc
Diamond indenter	1pc
Small flat anvil	1pc
Largeflatanvil	1pc
V-type anvil	1pc

HRA test block	1pc
HRB test block	1pc
HRC test block	3pcs
HR15N test block	1pc
HR30N test block	2pcs
HR45N test block	1pc

# **HB3000**

#### **DIGITAL BRINELL HARDNESS TESTER**





- ◆ Electronic close-loop load control system
- Can converted to HV, HK, HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRK, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, HS
- ◆ Touch screen
- With manufacturer inspection certificate



Small flat anvil



Large flat anvil



V-type anvil



#### SPECIFICATION

SPECIFICATION		
Measuring range	8-650HBW	
Loading force	62.5, 100, 125, 187.5, 250, 500, 750, 1000, 1500, 3000kgf	
Measuring result	read from LCD	
Stage elevation	manual	
Load control	automatic	
Load dwell time	5-60 seconds	
Max. test height	225mm	
Max.throat	135mm	
Dimension	545×235×79mm	
Weight	130kg	

Main unit	1pc
20X measuring microscope	1pc
Ø10mm carbide ball indenter	1pc
Ø5mm carbide ball indenter	1pc
Ø2.5mm carbide ball indenter	1pc
Small flat anvil	1pc

Large flat anvil	1pc
V-type anvil	1pc
Hardness test block 150-250HBW10/3000	1pc
Hardness test block 150-250HBW5/700	1pc
Anti-dust cover	1pc

#### MICRO-VICKERS HARDNESS TESTER

- For measuring the hardness of the thin, small workpiece or coating
- Automatic turret
- The hardness scale can be changed to Rockwell and Brinell scales
- ◆ Touch screen
- With manufacturer inspection certificate



Measuring system (optional)



#### **SPECIFICATION**

Measuring range	8-2900HV	
Test load	0.01, 0.025, 0.05, 0.1, 0.2, 0.3, 0.5, 1kgf	
Unit	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1	
Stage elevation	manual	
Loading control	automatic(loading/dwell/unloading)	
Loading time	1~99s	
Objective	10X(observation), 40X( measurement)	
Eyepiece	10X	
Total magnification	100X(observation), 400X(measurement)	
Max. test height	100mm	
Max.throat	130mm	
	size: 100×100mm	
X-Y stage	travel range: 25×25mm	
	graduation: 0.01mm	
Dimension	540×260×650mm	
Weight	50kg	

#### **INCLUDED ACCESSORIES**

Main unit	1pc
10X eyepiece	1pc
X-Y stage	1pc
Test block	1pc
Touch screen pen	1pc
Level	1pc
Dustproof cover	1pc
Slice holder	1pc
Cylinder holder	1pc
Vice	1pc

Measuring system	HVS-MS
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# HVS1000S

#### **MICRO-VICKERS HARDNESS TESTER**



- Basic type
- For measuring the hardness of the thin, small workpiece or coating
- Automatic turret
- The hardness scale can be changed to Rockwell and Brinell scales
- ◆ With manufacturer inspection certificate



Measuring system (optional)



#### **SPECIFICATION**

Measuring range	8-2900HV	
Test load	0.01, 0.025, 0.05, 0.1, 0.2, 0.3, 0.5, 1kgf	
Unit	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1	
Stage elevation	manual	
Loading control	automatic(loading/dwell/unloading)	
Loading time	1~60s	
Objective	10X(observation), 40X(measurement)	
Eyepiece	10X	
Total magnification	100X(observation), 400X(measurement)	
Max. test height	100mm	
Max.throat	110mm	
	size: 100×100mm	
X-Y stage	travel range: 25×25mm	
	graduation: 0.01mm	
Dimension	530×290×490mm	
Weight	40kg	

#### **INCLUDED ACCESSORIES**

Main unit	1pc
10X eyepiece	1pc
X-Y stage	1pc
Test block	1pc
Level	1pc
Dustproofcover	1pc
Slice holder	1pc
Cylinder holder	1pc
Vice	1pc

Automatic turret

HVS10M/50M

- ◆ Touch screen
- The hardness scale can be changed to Rockwell and Brinell scales
- ◆ With manufacturer inspection certificate





X-Y Stage(Optional)



**VICKERS HARDNESS TESTER** 

#### **SPECIFICATION**

Code	HVS10M	HVS50M
Testload	0.3, 0.5, 1, 3, 5, 10kgf	1, 5, 10, 20, 30, 50kgf
Stage elevation	r	nanual
Loading control	automatic(loading/dwell/unloading)	
Loading time	1-99s (adjustable)	
Objective	10X(observation), 20X( measurement)	
Eyepiece	10X	
Total magnification	100X(observation), 200X(measurement)	
Max. test height	160mm	
Max.throat	135mm	
	size: 100×100mm	
X-Y stage(optional)	travel range: 25×25mm	
	graduation: 0.01mm	
Dimension	530×280×630mm	
Weight	35kg	

#### **INCLUDED ACCESSORIES**

Main unit	1pc
10X,20X Objective	1pc.each
Indenter	1pc
Test block	2pcs
V-avail	1pc
Flatavail	2pcs
Level	1pc
<b>Dustproof cover</b>	1pc

Measuring system	HVS-MS
X-Y stage	HVS-STAGE

## HVS1000MS/HVS1000MCNC

# AUTOMATIC MICRO-VICKERS HARDNESS TESTER



- Mainly used for various metal parts and parts after thermal treatment Vickers
  hardness measurement. It is also suitable for the determination of effective
  hardening depth, coating and heat affected parts of welding parts.
- It can also be used to observe the metallographic structure of various metal parts and collect, display and print the image
- ◆ Automatic turret
- The hardness scale can be changed to Rockwell and Brinell scales
- ◆ With manufacturer inspection certificate







**HVS1000MCNC** 

#### **SPECIFICATION**

Code	HVS1000MS	HVS1000MCNC
Measuring range	8-2900HV	
Testload	0.01, 0.025, 0.05, 0.1, 0.2, 0.3, 0.5, 1kgf	
Unit	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1	
Stage elevation	Manual	Automatic
Focus	Manual	Automatic
Repeatability	±1.	0%
Loading control	automatic(loading	g/dwell/unloading)
Loading time	1~99s	
Objective	10X(observation), 40X(measurement)	
Eyepiece	10X	
Total magnification	10X(observation), 40X(measurement)	
Camera pixel	5M	
Max. test height	160mm	
Max.throat	160mm	
	size: 150×150mm	
	travel range: 50×50mm	
	movement graduation: 0.001mm	
	movement speed: 1-10mm/s, adjustable	
X-Y stage	movement position repeatability: 1-3um	
	control: the software system can control the X-Y stage movement automatically by programming, click any point to set the random moving position	
Dimension	540×260	×650mm
Weight	50kg	

Main unit1pc10X eyepiece1pcCamera1pcC-mount1pcComputer(with software)1pcUSB dongle1pcLevel1pc
Camera 1pc C-mount 1pc Computer(with software) 1pc USB dongle 1pc
C-mount 1pc Computer(with software) 1pc USB dongle 1pc
Computer(with software) 1pc USB dongle 1pc
USB dongle 1pc
<u> </u>
Level 1pc
Test block 2pcs
X-Y stage 1pc
Controller 1pc
Vice 1pc
Slice holder 1pc
Cylinder holder 1pc
<b>Touch screen pen</b> 1pc
<b>Dustproof cover</b> 1pc

## **ROCKWELL/BRINELL/VICKERS HARDNESS TESTER**







- ◆ Rockwell testing value gets from screen, and the Brinell and Vickers hardness gets from table in the operation manual
- With manufacturer inspection certificate





RBV150C

Small flat anvil



Large flat anvil



V-type anvil



#### **SPECIFICATION**

of Edit Idanian	
Load force for Rockwell	Preload force: 98N, Total force: 588, 980, 1471 N
Rockwell resolution	0.1HR
Load force for Brinell	306, 613, 1839N
Load force for Vickers	294N
Stage elevation Stage elevation	manual
Loading control	motorized
Max. test height	175mm(Rockwell),100mm(Brinell),115mm(Vickers)
Max. throat	165mm
Dimension	520×240×700mm
Weight	105kg

Main unit	1pc
Ø1.5875mm ball carbide indenter	1pc
Diamond indenter for Rockwell	1pc
Ø5mm ball indenter for Brinell	1pc
Ø2.5mm ball indenter for Brinell	1pc
IndenterforVickers	1pc
Small flat anvil for Rockwell	1pc

Large flat anvil for Rockwell	1pc
V-type anvil	1pc
HRC hardness test block	2pcs
HRB hardness test block	1pc
Brinell hardness test block	1pc
Vickers hardness test block	1pc
Dustproofcover	1pc

# **HL100**

#### **PORTABLE HARDNESS TESTER**







- Based on HL scale, converted to other hardness scales (HV, HB, HRC, HRB, HS) and tensile strength MPa
- ◆ With wireless printer
- Can set impact direction
- With average value calculation function
- ◆ Automatic power off
- Conforms to the standard ASTM A956-02
- With manufacturer inspection certificate



Wireless printer (included)









#### SPECIFICATION

Resolution	1HLD, 1HV, 1HB, 0.1HRC, 0.1HRB, 1HS, 1MPa
Accuracy	±6HLD/0.6HRC(HLD=800)
	5kg (directly)
Min. workpiece weight	2kg (on solid support)
	0.1kg (coupled on large plate)
Min. workpiece thickness	5mm
Min. workpiece diameter	22mm
Max. workpiece surface roughness	1.6µm(Ra)
Power	3xAAA batteries
Dimension	150 × 80 × 24mm

#### **INCLUDED ACCESSORIES**

111020020710020071120	
Main unit	1рс
Wireless printer	1pc
Test block	1pc
Small support ring	1pc
Brush	1pc
Charger for printer	1pc

HL-SP	Support ring (12pcs/set)
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## **PORTABLE HARDNESS TESTER**

- ◆ Touch screen, with backlight
- Based on HL scale, converted to other hardness scales (HV, HB, HRC, HRB, HS) and tensile strength Mpa
- With wireless printer
- Can set impact direction
- ◆ Memory:500
- ◆ Low and high limits with judgement
- ◆ Automatic power off
- ◆ Conforms to the standard ASTM A956-02
- With manufacturer inspection certificate





Wireless printer (included)



Support ring (12pcs/set, optional)



DC(optional)



C(optional)







**G**(optional)

#### **SPECIFICATION**

Resolution	1HLD, 1HV, 1HB, 0.1HRC, 0.1HRB, 1HS, 1MPa	
Accuracy	±6HLD/0.6HRC(HLD=800)	
	5kg (directly)	
Min. workpiece weight 2kg (on solid support)		
	0.1kg (coupled on large plate)	
Min. workpiece thickness	5mm	
Min. workpiece diameter	22mm	
Max. workpiece surface roughness	1.6µm(Ra)	
Power	Rechargeable battery	
Dimension	135×83×24mm	

#### **INCLUDED ACCESSORIES**

Main unit	1pc
Wireless printer	1pc
Test block	1pc
Small support ring and brush	1pc.each
USB cable and software	1pc
Charger	2pcs

01 11010/12 /100200011120	
Impact device DC	HL200-DC
Impact device C	HL200-C
Impact device D+15	HL200-D15
Impact device DL	HL200-DL
Impact device G	HL200-G
Support ring (12pcs/set)	HL-SP

# **HL350**

#### **PORTABLE HARDNESS TESTER**







- Based on HL scale, converted to other hardness scales (HV, HB, HRC, HRB, HS) and tensile strength MPa
- Impact direction cab be set
- ◆ With average value calculation function
- ◆ Conforms to the standard ASTM A956-02





Support ring (12pcs/set, optional)

#### **SPECIFICATION**

Resolution	1HLD, 1HV, 1HB, 0.1HRC, 0.1HRB, 1HS, 1MPa	
Accuracy	±8HLD/0.8HRC(HLD=800)	
	5kg (directly)	
Min. workpiece weight	2kg (on solid support)	
	0.1kg (coupled on large plate)	
Min. workpiece thickness	5mm	
Min. workpiece diameter	22mm	
Max. workpiece surface roughness	1.6µm(Ra)	
Power	3xAAA batteies	
Dimension	121×68×30mm	

#### **INCLUDED ACCESSORIES**

Main unit	1pc
Test block	1pc
Small support ring	1pc
Brush	1pc
Batteries	3pcs

#### **OPTIONAL ACCESSORIES**

Support ring (12pcs/set)	HL-SP
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# **HL400**

#### **PORTABLE HARDNESS TESTER**



- Based on HL scale, converted to other hardness scales (HV, HB, HRC, HRB, HS) and tensile strength MPa
- ◆ Impact direction cab be set
- ◆ With average value calculation function
- ◆ Automatic power off
- ◆ Conforms to the standard ASTM A956-02
- ◆ With manufacturer inspection certificate

#### **SPECIFICATION**

SPECIFICATION		
Resolution	1HLD, 1HV, 1HB, 0.1HRC, 0.1HRB, 1HS, 1MPa	
Accuracy ±6HLD/0.6HRC(HLD=800)		
	5kg (directly)	
Min. workpiece weight	2kg (on solid support)	
	0.1kg (coupled on large plate)	
Min. workpiece thickness	5mm	
Min. workpiece diameter	22mm	
Max. workpiece surface roughness	1.6µm(Ra)	
Power	3xAAA batteries	
Dimension	150 × 80× 24mm	



INCLUDED ACCESSORIES	
Main unit	1pc
Test block	1pc
Small support ring	1pc
Brush	1pc
USB cable	1pc
Batteries	3pcs

# HL450/HL450W

#### **PORTABLE HARDNESS TESTER**

- ◆ Pocket size, easy to carry
- Based on HL scale, converted to other hardness scales (HV, HB, HRC, HRB, HS) and tensile strength MPa
- Impact direction can be set
- ◆ With average value calculation function
- ◆ Conforms to the standard ASTM A956-02
- ◆ With manufacturer inspection certificate

#### **SPECIFICATION**









#### **INCLUDED ACCESSORIES**

Main unit	1pc
Test block	1pc
Small support ring	1pc

Brush	1pc
Charger	1pc

#### **OPTIONAL ACCESSORIES**

Support ring (12pcs/set)	HL-SP

## GY-2

#### **FRUIT HARDNESS TESTER**

- Used to measure the hardness of some fruit like apples, pears
- ◆ Hardness can judge ripeness of the fruit

# SPECIFICATION

Range	0.5-4kg/cm²(0.5-4x10⁵pa)		
Graduation	0.02kg/cm²(0.02x10⁵pa)		
Accuracy	±2%		
Probe diameter	Ø3.5mm		
Probe depth	10mm		
Dimension	151x55x30mm		
Weight	220g		



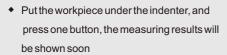
Main unit	1pc
Probe	1pc

# HSC

# **AUTOMATIC SHORE HARDNESS TESTER**

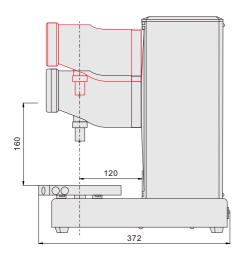


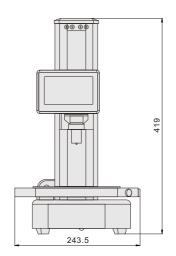


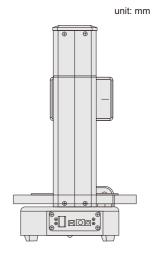


- Can measure plastic, rubber, sponge with different hardness
- Include three indenters (type A, D, OO)
- ◆ Touch screen
- ◆ With data output
- With manufacturer inspection certificate









#### **SPECIFICATION**

0. 20	
Probe moving range	160mm
Stage moving range(X)	80mm
Loading control	Stepping motor
Loading force	Spring force
Max. workpiece height	120mm
Accuracy	±1
Resolution	0.1
Output	USB
Powersupply	DC24V/5A

Main unit	1pc
AD/DC adapter	1pc
Software and USB cable	1pc.each
A/D/OO indenter	1pc.each
Calibration block	2pcs

# **SERIESHS**

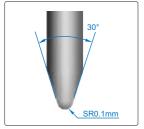
# **DIGITAL SHORE HARDNESS TESTER**



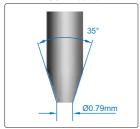




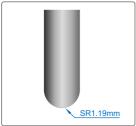
- ◆ Conforms to ISO868, ISO7619, ASTM D 2240
- Testing time is adjustable
- With average calculation function
- With manufacturer inspection certificate



HS5D indenter



HS1Aindenter



HSOO indenter



HS1A



Standard block (included)



PR100 printer (optional)



Standard (optional)

#### **SPECIFICATION**

Code	HS1A	HS5D	HSOO	
Scale	HA(Shore A)	HD(Shore D)	HOO(Shore OO)	
For material	soft plastic, rubber, leather, etc.	hard plastic, hard rubber, etc.	soft sponge, soft rubber, etc.	
Measuring range	20~90HA	20~90HD	20~90HOO	
Resolution	0.1HA	0.1HD	0.1HOO	
Accuracy	±1HA ±1HD ±1HOO			
Indenter protrusion	2.5mm			
Power	rechargeable battery			
Weight	180g			

#### **INCLUDED ACCESSORIES**

Main unit	1pc
Standard block	1pc
Charger	1pc
Software	1pc

Printer	PR100
Stand for HS1A	HS-1A-STD
Stand for HS5D	HS-5D-STD
Stand for HSOO	HS-OO-STD

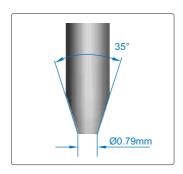
# SERIESHSM

## **SHORE HARDNESS TESTER**

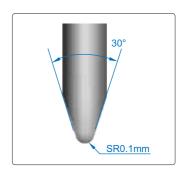
- ◆ Conforms to ISO868, ISO7619, ASTM D 2240
- With peak value indicator







HSM1A indenter



HSM5D indenter

#### **SPECIFICATION**

Code	HSM1A HSM5D		
Scale	HA(Shore A)	HD(Shore D)	
For material	soft plastic, rubber, leather, etc. hard plastic, hard rubber, etc.		
Measuring range	20~90HD 20~90HD		
Graduation	1HA 1HD		
Accuracy	±1HA ±1HD		
Indenter protrusion	2.5mm		
Weight	500g		

Stand for HSM1A	HSM-1A-ST
Stand for HSM5D	HSM-5D-ST

#### **TEST STAND FOR DIGITAL SHORE HARDNESS TESTER**

- ◆ For digital shore hardness tester
- ◆ Perform repeatable hardness measurement due to fewer posibilities of human error or measurement variations
- ◆ Special structure for stable loading



**HS-1A-STD** 

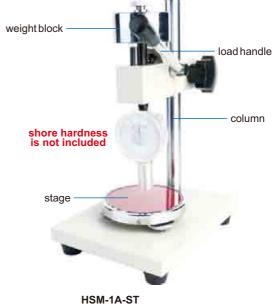
#### **SPECIFICATION**

Code	HS-1A-STD	HS-5D-STD	HS-OO-STD
For hardness tester	HS1A HS5D HSOC		HSOO
Test force (weight block)	1kg	5kg	0kg
Stage diameter	Ø115mm		
Max. workpiece height	45mm		
Max. testing width	63mm(from test point to the column)		
Dimension	Ø195x370mm		
Weight	5.6kg	11kg	4.5kg

## **SERIESHSM**

#### **TEST STAND FOR SHORE HARDNESS TESTER**

- For shore hardness tester
- ◆ Perform repeatable hardness measurement due to fewer posibilities of human error or measurement variations



#### **SPECIFICATION**

Code	HSM-1A-ST	HSM-5D-ST	
For hardness tester	HSM1A HSM5D		
Test force (weight block)	1kg	5kg	
Stage diameter	Ø100mm		
Max. workpiece height	75mm		
Max. testing width	65mm (from test point to the column)		
Weight	2kg	7kg	

# **UHT200**

#### **ULTRASONIC HARDNESS TESTER**







- Mainly used for small or thin-walled products as well as parts of complex shape or with areas that need to be tested in hard-to-reach places
- With a shockproof silicone case that prevents the device from malfunctioning
- Hardness scales: HV, HB, HRC and tensile strength Mpa
- ◆ Memory:256
- ◆ Automatic power off
- With special software for data processing
- With manufacturer inspection certificate







Measure small part



#### SPECIFICATION

SPECIFICATION			
Measuring range	HRC	20-70	
	НВ	90-650	
Measuringrange	HV	230-940	
	Мра	370-1740	
	HRC	±1.5	
Accuracy	НВ	±3%	
	HV	±3%	
Min. workpiece thickness		1mm	
Min. workpiece diam	eter	5mm	
Max. workpiece surfa	ace roughness	Ra:2.5µm	
Min. thickness of surface hardening layer		0.1mm	
Min. test area		Ø1mm	
Powersupply		Rechargeable battery	
Dimension		122×65×24mm	

INCLUDED ACCESSORIES		
Main unit	1pc	
Probe (50N)	1pc	
Rechargeable battery	2pcs	
USB cable and software	1pc.each	
Charger	1pc	

## **BARCOL HARDNESS TESTER**



- ◆ To measure the hardness of thick workpieces
- ◆ Comforms to ASTM B648-2000
- ◆ With manufacturer inspection certificate

reinforced plastic, hard plastic, etc.

made of pure aluminum, aluminum alloy, fiber



#### **SPECIFICATION**

Hardness range	0~100HBa(25~150HBW)	
Graduation	1НВа	
Accuracy	±2HBa (42 ~ 52HBa) ±1HBa (84 ~ 88HBa)	
Min. workpiece thickness	0.8mm	
Dimension	142×65×90mm	
Weight	500g	

#### **INCLUDED ACCESSORIES**

Main unit	1pc
Spare indenter	2pcs
Hardness test block	2pcs
Wrench	1pc

## **SERIES DHB937**

#### **DIGITAL BARCOL HARDNESS TESTER**



- To measure the hardness of thick workpieces made of pure aluminum, aluminum alloy, fiber reinforced plastic, hard plastic, etc.
- ◆ Comforms to ASTM B648-2000
- ◆ The scale of DHB937-2 can converted to HW, HV HBW and HRE



#### **SPECIFICATION**

Code	DHB937-1	DHB937-2	
Scale conversion	No	Yes	
Hardness range	0~100HBa(25~150HBW)		
Graduation	0.1HBa		
Accuracy	±2HBa (42 ~ 48HBa) ±1HBa (84 ~ 88HBa)		
Min. workpiece thickness	0.8mm		
Powersupply	3×AAA batteries		
Dimension	180×70×90mm		
Weight	800g		

Main unit	1pc
Spare indenter	2pcs
Calibration block	1pc
Battery	3pcs
Hardness test block	2pcs
Wrench	1pc

# **SERIESHW**

#### **WEBSTER HARDNESS TESTER**

- ◆ To measure the hardness of soft metal such as aluminum alloy, copper, brass, soft steel
- ◆ Conforms to the standard ASTM B647



#### **SPECIFICATION**

Code	HW-L20	HW-L20A	HW-L20B	HW-B75	HW-C75	HW-B92
Application	aluminum alloy		hard aluminum alloy and brass	soft brass and copper	soft steel and cold-rolled steel	
Measuring hardness range	58-131HV		63-105HRF	18-100HRE	50-92HRB	
Thickness range to be measured of flat workpiece	0.4 ~ 6mm	0.4 ~ 13mm	0.4 ~ 8mm	0.4 ~ 6mm	0.4 ~ 6mm	0.4 ~ 6mm
Min. Internal diameter of tube workpiece	Ø10mm	Ø10mm	Ø6mm	Ø10mm	Ø10mm	Ø10mm
Hardness range	0 ~ 20HW					
Min. reading	1HW					
Accuracy	±0.5HW (at 5 ~ 17HW)					
Dimension	205×30×85mm					
Weight	500g					

#### **INCLUDED ACCESSORIES**

Main unit	1pc
Spare indenter	1pc

Hardness test block	1pc
Wrench	1pc

#### STE70

#### **DIGITAL REBOUND TESTER**



- Measure the strength of general building components, bridges and various concrete components (slabs, beams, columns, bridges and so on.)
- ◆ Built in national unified curve (JGJ/T23-2011)
- ◆ Small size, modular design, easy to use
- Built in large capacity memory, can store 999 standard components, and a single component can set up 99 measuring areas and 159840 measuring point data



#### **SPECIFICATION**

SPECIFICATION			
Measuring range	10-60Mpa		
Impact energy	2.207J		
Accuracy	±1		
Sifness of spring	785±30N.m		
Working length of spring	61.5±0.3mm		
Tensile length of spring	75±0.3mm		
Rated value of steel anvil	80±2		
Operating temperature	-4°C-40°C		
Display	2.08 inch OLED display		
Powersupply	rechargeable battery		
Weight	1.1kg		

INCLUDED ACCESSORIES	
Main nuit	1pc
Sander	1pc
Spare spring	1set
Screwdriver	3pcs
Software and cable	1set
AD/DC adapter	1pc

# SERIESBLK

#### STANDARD HARDNESS BLOCK







Rockwell/Vickers/Brinell

Shore A

Leeb

#### **SPECIFICATION**

Code	Туре	Hardness
BLK-HRC1	Rockwell C	60-70HRC
BLK-HRC2		20-30HRC
BLK-HRC3		30-35HRC
BLK-HRC4		40-50HRC
BLK-HRC5		50-55HRC
BLK-HRB1	RockwellB	85-95HRB
BLK-HRB2	Nockwell D	60-70HRB
BLK-HV1		700-800HV5
BLK-HV2	Vickers	700-800HV10
BLK-HV3	VICKEIS	400-600HV5
BLK-HV4		400-600HV10
BLK-HB1	Brinell	150-250HBW 10/3000
BLK-HB2	Dilliell	150-250HBW 5/750
BLK-HLD	Leeb	750-830HLD
BLK-HSA	ShoreA	7pcs/set: 30-39HA, 40-49HA, 50-59HA, 60-69HA, 70-79HA, 80-89HA, 90-99HA

# **RC30**

# **SURFACE ROUGHNESS SPECIMEN**

- For checking, identifying and specifying the roughness by symbol
- ◆ Accuracy: -17%~+12%



Machining method	Quantity	Roughness (Ra)
Flatlapping	2	0.1, 0.05μm
External grinding	4	0.2, 0.4, 0.8, 1.6µm
Plain grinding	6	0.05, 0.1, 0.2, 0.4, 0.8, 1.6µm
Horizontal milling	6	0.4, 0.8, 1.6, 3.2, 6.3, 12.5µm
Vertical milling	6	0.4, 0.8, 1.6, 3.2, 6.3, 12.5µm
Turning	6	0.4, 0.8, 1.6, 3.2, 6.3, 12.5µm