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Manual Rockwell hardness tester SHR150M(D)

Introductions:

SHR150M is an effective and affordable Rockwell testing machine with high accuracy, reliability and durability, and it is applied in the workshops and measurement departments for determining the Rockwell hardness of ferrous and non-ferrous metals.

SHR150M adopts mechanical test cycle without any need of electricity, load force 60, 100, 150Kg is selected by dial knob, test force is manually loaded in handle, and tested result: HRA, HRB, HRC is showed on the analogue gauge.



Technical Specifications:

Rockwell Scales	HRA, HRB, HRC
Preliminary test force	10Kgf(98.07N)
All Testing Force	60Kgf (588N), 100Kgf (980N), 150Kgf (1471N)
Hardness Indication	Analogue
Hardness analogue resolution	0.5HR
Max. Height of Specimen	170mm
Instrument Throat	140mm
Dimension (L*W*H)	520*240*700MM
Gross/Net Weight	120/90Kg
Accuracy	Conform to GB/T230.2; ASTM E-18; ISO6508
Remark: Optional protective indenter device is available on the model of SHR150MD.	

Standard delivery:

Main unit	1SET	Ø1.588mm ball indenter	1PC	Ø 55mm flat anvil	1PC
Hardness block (57-70) HRC	1PC	Ø1.588mm spare ball	5PCS	Ø 150mm flat anvil	1PC
Hardness block (20-33) HRC	1PC	Cone diamond indenter	1PC	Operation Manual	1COPY
Hardness block (85-100) HRB	1PC	Ø 55mm V-shape anvil	1PC	Accessories box	1PC



Medium Testing Anvil



V-shaped Testing Anvil



Large Testing Anvil

Optional accessories:

Other Rockwell Hardness blocks; Ø 10mm flat anvil; Ø3.175mm ball indenter, and so on

Electronic Rockwell hardness tester SHR150E(D)

Introductions:

SHR150E is an effective and affordable Rockwell testing machine with high accuracy, reliability and durability, and it is applied in the workshops and measurement departments for determining the Rockwell hardness of ferrous and non-ferrous metals.

SHR150E adopts the design of load test force in electric, load force 60, 100, 150Kg is selected by dial knob, test force is loaded in switch control, and tested result: HRA, HRB, HRC is showed on the analogue gauge.



Technical Specifications:

Rockwell Scales	HRA, HRB, HRC
Preliminary test force	10Kgf(98.07N)
All Testing Force	60Kgf (588N), 100Kgf (980N), 150Kgf (1471N)
Hardness Indication	Analogue
Hardness analogue resolution	0.5HR
Dwell Time	2 ~ 60S
Max. Height of Specimen	170mm
Instrument Throat	140mm
Dimension (L*W*H)	520*240*700MM
Gross/Net Weight	120/90Kg
Power Supply	AC220V /50Hz; 110V/60Hz
Accuracy	Conform to GB/T230.2; ASTM E-18; ISO6508
Remark: Optional protective indenter device is available on the model of SHR150ED.	

Standard delivery:

Main unit	1SET	Ø1.588mm ball indenter	1PC	Ø 55mm flat anvil	1PC
Hardness block (57-70) HRC	1PC	Ø1.588mm spare ball	5PCS	Ø 150mm flat anvil	1PC
Hardness block (20-33) HRC	1PC	Cone diamond indenter	1PC	Power cable	1PC
Hardness block (85-100) HRB	1PC	Ø 55mm V-shape anvil	1PC	Accessories box	1PC



Medium Testing Anvil



V-shaped Testing Anvil



Large Testing Anvil

Optional accessories:

Other Rockwell Hardness blocks; Ø 10mm flat anvil; Ø3.175mm ball indenter, and so on

Digital Rockwell hardness tester SHR150C(D)

Introductions:

SHR150C is an effective digital Rockwell testing machine with high accuracy, reliability and durability, it is applied at the workshops and measurement departments for determining the Rockwell hardness of ferrous and non-ferrous metals.

SHR150C adopts the design of load test force in electric, except to lift up the anvil and chose the test force, other operations are entirely automatic. The test force, dwell time, load and unload process, and test results are displayed on LCD screen, which avoid the man-made error and enhance the measuring accuracy, meanwhile, built-in processor and mini-printer can record and print the main measuring data for reducing human working intension.



Build-in Mini-printer



Hardness Blocks



Anvil



Diamond Rockwell Indenter

Technical Specifications:

Rockwell Scales	HRA, HRB, HRC
Preliminary test force	10Kgf(98.07N)
All Testing Force	60Kgf (588N), 100Kgf (980N), 150Kgf (1471N)
Hardness Indication	Digital LCD Display
Hardness Resolution	0.1HR
Dwell Time	1 ~ 60S
Auto Hardness conversion	HRC, HRB, HRA, HV, HK, HBW, etc.
Max. Height of Specimen	170mm
Instrument Throat	140mm
Dimension (L*W*H)	520*240*700MM
Gross/Net Weight	120/90Kg
Power Supply	AC220V /50Hz;110V/60Hz
Accuracy	Conform to GB/T230.2; ASTM E-18; ISO6508
Remark: Optional protective indenter device is available on the model of SHR150ED.	

Standard delivery:

Main unit	1SET	Ø1.588mm ball indenter	1PC	Ø 55mm flat anvil	1PC
Hardness block (57-70) HRC	1PC	Ø1.588mm spare ball	5PCS	Ø 150mm flat anvil	1PC
Hardness block (20-33) HRC	1PC	Cone diamond indenter	1PC	Power cable	1PC
Hardness block (85-100) HRB	1PC	Ø 55mm V-shape anvil	1PC	Accessories box	1PC

Manual Superficial Rockwell hardness tester SHR45M(D)

Introductions:

SHR45M is an effective and affordable superficial Rockwell testing machine with high accuracy, reliability and durability, it is applied in the workshops and measurement departments for determining the Rockwell hardness of ferrous and non-ferrous metals.

SHR45M adopts mechanical test cycle without any need of electricity, load force 15, 30, 45Kg is selected by dial knob, test force is manually loaded in handle, and tested result is showed on the analogue gauge.



Technical Specifications:

Rockwell Scales	HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Preliminary test force	3Kgf (29.42N)
All Testing Force	15Kgf (147.1N), 30Kgf (294.2N), 45Kgf (441.3N)
Hardness Indication	Analogue
Hardness analogue resolution	0.5HR
Max. Height of Specimen	170mm
Instrument Throat	140mm
Dimension (L*W*H)	520*240*700MM
Gross/Net Weight	120/90Kg
Accuracy	Conform to GB/T230.2; ASTM E-18; ISO6508
Remark: Optional protective indenter device is available on the model of SHR150MD.	

Standard delivery:

Main unit	1SET	Ø1.588mm ball indenter	1PC	Ø 55mm flat anvil	1PC
Hardness block HRN	1PC	Ø1.588mm spare ball	5PCS	Ø 150mm flat anvil	1PC
Hardness block HRN	1PC	Cone diamond indenter	1PC	Operation Manual	1COPY
Power cable	1PC	Ø 55mm V-shape anvil	1PC	Accessories box	1PC



Medium Testing Anvil



V-shape Testing Anvil



Large Testing Anvil

Optional accessories:

Other Rockwell Hardness blocks; Ø 10mm flat anvil; Ø3.175mm ball indenter, and so on

Electronic Superficial Rockwell hardness tester SHR45E(D)

Introductions:

SHR45E is an effective and affordable Rockwell testing machine with high accuracy, reliability and durability, it is applied in the workshops and measurement departments for determining the Rockwell hardness of ferrous and non-ferrous metals.

SHR45E adopts the design of load test force in electric, load force 15, 30, 45Kg is selected by dial knob, test force is loaded in switch control, and tested result: HRA, HRB, HRC is showed on the analogue gauge.



Technical Specifications:

Rockwell Scales	HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Preliminary test force	3Kgf (29.42N)
All Testing Force	15Kgf (147.1N), 30Kgf (294.2N), 45Kgf (441.3N)
Hardness Indication	Analogue
Hardness analogue resolution	0.5HR
Hardness Indication	Analogue
Hardness analogue resolution	0.5HR
Max. Height of Specimen	170mm
Instrument Throat	140mm
Dimension (L*W*H)	520*240*700MM
Gross/Net Weight	120/90Kg
Accuracy	Conform to GB/T230.2; ASTM E-18; ISO6508

Remark: Optional protective indenter device is available on the model of SHR150MD.

Standard delivery:

Main unit	1SET	Ø1.588mm ball indenter	1PC	Ø 55mm flat anvil	1PC
Hardness block HRN	1PC	Ø1.588mm spare ball	5PCS	Ø 150mm flat anvil	1PC
Hardness block HRN	1PC	Cone diamond indenter	1PC	Operation Manual	1COPY
Accessories box	1PC	Ø 55mm V-shape anvil	1PC		



Medium Testing Anvil



V-shape Testing Anvil



Large Testing Anvil

Optional accessories:

Other Rockwell Hardness blocks; Ø 10mm flat anvil; Ø3.175mm ball indenter, and so on.

Digital Superficial Rockwell hardness tester SHR45C(D)

Introductions:

SHR45C is an effective and affordable Rockwell testing machine with high accuracy, reliability and durability, it is applied in the workshops and measurement departments for determining the Rockwell hardness of ferrous and non-ferrous metals.

SHR45C adopts the design of load test force in electric, except to lift up the anvil and choose the test force, other operations are entirely automatic, and the test force, dwell time, load and unload process, and test results are displayed on LCD screen, which avoid the man-made error and enhance the measuring accuracy, meanwhile, built-in mini-printer can record and print the main measuring data for reducing human working intensity..



Build-in Mini-printer



Hardness Blocks



Anvil



Diamond Rockwell Indenter

Technical Specifications:

Rockwell Scales	HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Preliminary test force	3Kgf (29.42N)
All Testing Force	15Kgf (147.1N), 30Kgf (294.2N), 45Kgf (441.3N)
Hardness Indication	Digital LCD Display
Hardness Resolution	0.1HR
Dwell Time	1 ~ 60S
Auto Hardness conversion	HRC, HRB, HRA, HV, HK, HBW, etc.
Max. Height of Specimen	170mm
Instrument Throat	140mm
Dimension (L*W*H)	520*240*700MM
Gross/Net Weight	120/90Kg
Power Supply	AC220V /50Hz;110V/60Hz
Accuracy	Conform to GB/T230.2; ASTM E-18; ISO6508
Remark: Optional protective indenter device is available on the model of SHR150ED.	

Standard delivery:

Main unit	1SET	Ø1.588mm ball indenter	1PC	Ø 55mm flat anvil	1PC
Hardness block HRN	1PC	Ø1.588mm spare ball	5PCS	Ø 150mm flat anvil	1PC
Hardness block HRN	1PC	Cone diamond indenter	1PC	Operation Manual	1COPY
Power cable	1PC	Ø 55mm V-shape anvil	1PC	Accessories box	1PC

Digital Superficial Twin Rockwell hardness tester HRSS150

Introductions:

HRSS150 is a effective and affordable hardness testing machine with novel appearance and unique inside structure, features high measuring accuracy, reliable performance and applicable to wide fields, it is applicable to measure hardness testing all kinds of Rockwell and Superficial Rockwell. It can to measure the hardness of hard metals, carburizing steels, quenching steels, hardcast irons, mild steels, A1, Cu and malleable irons

HRSS150 has big LCD screen to display the measuring data, and it has the contrast function of Brinell, Rockwell and Vickers, and it has other functions, such as, revise the dwell time, data dispose, storage, print and RS-232 output, etc.

Conform to GB/T230.2; ASTM E-18; ISO6508



Technical Specifications:

Rockwell Scales	HRA, HRB, HRC; HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Preliminary test force	29.4M(3kg),98.07N(10kg)
Total test force	For superficial Rockwell testing:147.1N(15Kgf), 294.2N(30 Kgf), 441.3N(45 Kgf); For Rockwell hardness testing: 588.4N(60 Kgf),980.7N(100 Kgf), 1471N(150 Kgf)
Hardness Indication	Digital LCD Display
Hardness Resolution	0.1HR
Dwell time	1-60s adjustable
Loading method	Automatic
Auto Hardness Conversion	HRC, HRB, HRA, HV, HK, HBW, etc.
Max Height of Specimen	180mm
Instrument Throat	160mm
Gross/Net Weight	120/90Kg
Dimension	551*260*80 mm
Power Supply	AC220V /50Hz;110V/60Hz
Accuracy	Conform to GB/T230.2; ASTM E-18; ISO6508

Standard delivery:

Main unit	1SET	Ø1.588mm ball indenter	1PC	Ø 55mm flat anvil	1PC
Hardness block (57-70) HRC	1PC	Ø1.588mm spare ball	5PCS	Ø 150mm flat anvil	1PC
Hardness block (20-33) HRC	1PC	Cone diamond indenter	1PC	Power cable	1PC
Hardness block (85-100) HRB	1PC	Ø 55mm V-shape anvil	1PC	Accessories box	1PC
Hardness block HRN	1PC	Hardness block HRN	1PC	Operation Manual	1COPY



Medium Testing Anvil



V-shape Testing Anvil



Large Testing Anvil

Vickers hardness tester HV5ZA, HV10ZA, HV30ZA, HV50ZA

Introduction:

Vickers Hardness Tester HV5ZA, HV10ZA, HV30ZA, HV50ZA is high-tech instruments integrate with technology of optics and mechanic, electronic and computer. It is the hardness testing machine for Vickers and Knoop scale measurements. It is specially designed for measure micro, thin and interface cladding materials, and Knoop hardness suit for test brittle and hard materials, such as glass, ceramics, carnelian and synthetic cut stone, etc, and it is widely used in scientific research organization, factory and quality inspection department.

Main characteristic:

It applies computer software program, high-resolution optical measuring system and photoelectric sensor. Through Key-input on the panel, it can adjust brightness of light source, select Vickers and Knoop test, hardness converse comparison, dwell time, file number and store, etc.

LCD screen displays test method, test force, length of diagonal, hardness value. It is easy to use with high precision.

HV5ZA/10ZA/30ZA/50ZA is equipped with auto-turret, Halogen light and Built-in Mini-printer as the standard delivery.



HV5ZA/10ZA/30ZA/50ZA with auto-turret



LCD screen and Panel



Auto-turret



Halogen Light-source



Built-in Mini-printer

Technical Specifications:

Model	HV5ZA	HV10ZA	HV30ZA	HV50ZA
Testing Force	2.94N(0.3Kgf)	2.94N(0.3Kgf)	9.8N(1.0Kgf)	9.8N(1.0Kgf)
	4.9N(0.5Kgf)	4.9N(0.5Kgf)	29.4N(3Kgf)	49.0N(5.0Kgf)
	9.8N(1.0Kgf)	9.8N(1Kgf)	49.0N(5.0Kgf)	98N(10Kgf)
	19.6N(2.0Kgf)	29.4N(3Kgf)	98N(10Kgf)	196N(20Kgf)
	29.4N(3.0Kgf)	49.0N(5Kgf)	196N(20Kgf)	294N(30Kgf)
	49.0N(5.0Kgf)	98.0N(10Kgf)	294N(30Kgf)	490N(50Kgf)
Testing Range	8HV0.3~2900HV50			
Auto-Turret	Automatic switch of 10x, 20x objective and indenter			
Loading Control	Automatic (loading, dwell, unloading)			
Magnification of Objective	10x (For Observation) ; 20x (For Measurement)			
Magnification of Eyepiece	10x			
Hardness Indication	LCD display			
Dwell Time	0~60s			
Illumination	Halogen Light-source			
Printing	Built-in Mini-printer			
Max Height of Specimen	160mm			
Instrument Throat	135mm			
Accuracy	Standard conforms to EN-ISO 6507			
Power Supply	AC220V/50Hz; 110V/60Hz			
Dimension	520×190×650mm			
Gross/Net Weight	60/50Kg			

Standard Delivery:

Main unit	1SET	10X Objectives	1PC	V-shape test anvil	1PC
Hardness block	2EA	20X Objectives	1PC	Vickers indenter	1PC
Auto-turret	1PC	10X measuring eyepiece	1PC	Power cable	1PC
Halogen Light-source	1PC	Large test anvil	1PC	Accessories box	1PC
Mini-printer	1PC	Medium test anvil	1PC	Operation Manual	1COPY

Optional Accessories:

Knoop Indenter, X,Y anvil Hardness block, Clamp, etc

Digital Vickers hardness tester HVS5ZA,HVS10ZA,HVS30ZA,HVS50ZA

Introduction:

Vickers Hardness Tester HV5ZA,HV10ZA, HV30ZA, HV50ZA is high-tech instruments integrate with technology of optics and mechanic, electronic and computer. It is the hardness testing machine for Vickers and Knoop scale measurements. It is specially designed for measure micro, thin and interface cladding materials, and Knoop hardness suit for test brittle and hard materials, such as glass, ceramics, carnelian and synthetic cut stone, etc, and it is widely used in scientific research organization, factory and quality inspection department.

Main characteristic:

It applies computer software program, high-resolution optical measuring system and photoelectric sensor. Through Key-input on the panel, it can adjust brightness of light source, select Vickers and Knoop test, hardness converse comparison, dwell time, file number and store, etc.

LCD screen displays test method, test force, length of diagonal, hardness value. It is easy to use with high precision.

HV5ZA/10ZA/30ZA/50Z is equipped with auto-turret, Halogen Light-source and Built-in Mini-printer as the standard delivery.

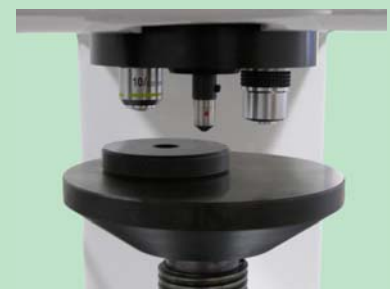
HVS-XZA is a full digital hardness testing instrument, don't need perator to read the length of diagonal, just press the sensor key.



Digital HVS5ZA/10ZA/30ZA/50ZA



LCD screen and Panel



Standard Auto-Turret



Halogen Light-source



Built-in Mini-printer

Technical Specifications:

Model	HVS5ZA	HVS10ZA	HVS30ZA	HVS50ZA
Testing Force	2.94N(0.3Kgf)	2.94N(0.3Kgf)	9.8N(1.0Kgf)	9.8N(1.0Kgf)
	4.9N(0.5Kgf)	4.9N(0.5Kgf)	29.4N(3Kgf)	49.0N(5.0Kgf)
	9.8N(1.0Kgf)	9.8N(1Kgf)	49.0N(5.0Kgf)	98N(10Kgf)
	19.6N(2.0Kgf)	29.4N(3Kgf)	98N(10Kgf)	196N(20Kgf)
	29.4N(3.0Kgf)	49.0N(5Kgf)	196N(20Kgf)	294N(30Kgf)
	49.0N(5.0Kgf)	98.0N(10Kgf)	294N(30Kgf)	490N(50Kgf)
Testing Range	8HV0.3~2900HV50			
Loading Control	Automatically (loading, dwell, unloading)			
Auto-Turret	Automatic switch of 10x, 20x objective and indenter			
Magnification of Objective	10x (For Observation) ; 20x (For Measurement)			
Magnification of Eyepiece	10x			
Hardness Indication	LCD display			
Hardness conversion	HR; HB; HK; etc			
Dwell Time	0~60s			
Illumination	Halogen Light-source			
Printing	Built-in Mini-printer			
Max Height of Specimen	160mm			
Instrument Throat	135mm			
Accuracy	Standard conforms to EN-ISO 6507			
Power Supply	AC220V/50Hz; 110V/60Hz			
Dimension	520×190×650mm			
Gross/Net Weight	60/50Kg			

Standard Delivery:

Main unit	1SET	10X Objectives	1PC	V-shape test anvil	1PC
Hardness block	2EA	20X Objectives	1PC	Vickers indenter	1PC
Auto-turret	1PC	10X measuring eyepiece	1PC	Power cable	1PC
Halogen Light-source	1PC	Large test anvil	1PC	Accessories box	1PC
Mini-printer	1PC	Medium test anvil	1PC	Operation Manual	1COPY

Optional Accessories:

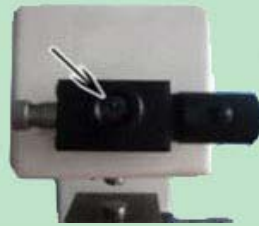
Knoop Indenter, X,Y anvil Hardness block, Clamp, etc

Micro Hardness Hester DHV1000A/HV1000A

Micro Vickers Hardness Tester DHV1000A/HV1000A, MHV1000A/HVS1000A and XHV1000A are precision hardness testing machines integrate the technology of optics, mechanics and computer. It is applicable to measure the hardness value of ferrous metals, non-ferrous metals, IC thin sections, coatings, ply-metals; Glass, ceramics, agate, precious stones, and it can be tested about the depth and the trapezium of the carbonized layers and quench hardened layers.



DHV1000A/HV1000A



Eyepiece



LCD panel

Standard delivery:

- Halogen light source
- 20x and 40x objective
- Vickers indenter
- X-Y anvil with 25mm travel micrometer
- LCD Panel, etc.

Optional accessories:

- Knoop indenter
- Mini-printer
- CCD adapter,
- Camera and Monitor
- Micro hardness testing software
- Auto-turret

Digital Micro Hardness Hester MHV1000A/HVS1000A

Microhardness tester MHV1000A/ HVS1000A is upgrading products base on DHV1000A/HVS1000A. Beside processing the their function, MHV1000A/HVS1000A is equipped with a big LCD display to show the technical parameters, and it can convert the tested HV scale to HRC, HRB, HBW, HK.



MHV1000A/HVS1000A



Built-in printer



Large LCD display

Standard delivery:

- Halogen light source
- 20x and 40x objective
- Vickers indenter
- Mini-printer
- X-Y anvil with 25mm travel micrometer
- LCD Panel, etc.

Optional accessories:

- Knoop indenter
- CCD adapter,
- Camera and Monitor
- Micro hardness testing software
- Auto-turret.

Digital Micro Hardness Tester XHV1000A

Micro hardness tester XHV1000 isA upgrading products base on MHV1000A/HVS1000A, it is equipped with auto-turret, LCD touch panel and mini-printer as the standard delivery.



XHV1000A



Built-in printer



Eye-piece



LCD touch panel



Touch Interface

Technical Specifications of micro hardness tester DHV1000A/HV1000A, MHV1000A/HVS1000A and XHV1000A:

Testing Forces	(0.098, 0.246, 0.49, 0.98, 1.96, 2.94, 4.90, 9.80) N (10, 25, 50, 100, 200, 300, 500, 1000) gf
Turret	Automatic (loading / dwell / unloading)
Magnification of the Microscope	200×, 400 ×
Dwell Time of the Test Force	(5-60)s
Min. Graduation Value of the Testing Drum Wheel	0.0625um
Testing range	1HV—2967HV
Dimension of the XY anvil	100 × 100 mm
Travel of the XY anvil	25 × 25mm
Max. height of the specimen	70 mm
Instrument throat	95mm
Light source	Halogen light source
Accuracy	Standard conforms to EN-ISO 6507
Power Supply	110V/220V,60/50Hz
Dimension & Net Weight	425 × 245 × 490 mm & 30Kg
Standard delivery	XY anvil ; Thin specimen anvil ; Fork-shaped anvil ; Fine wire anvil; Level; Adjustable screw ; 10 ×eyepiece ; 20x and 40x objective; Micro Vickers hardness blocks (high and medium)

Sample DEMO:



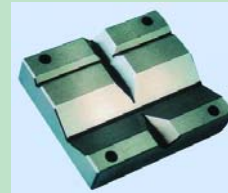
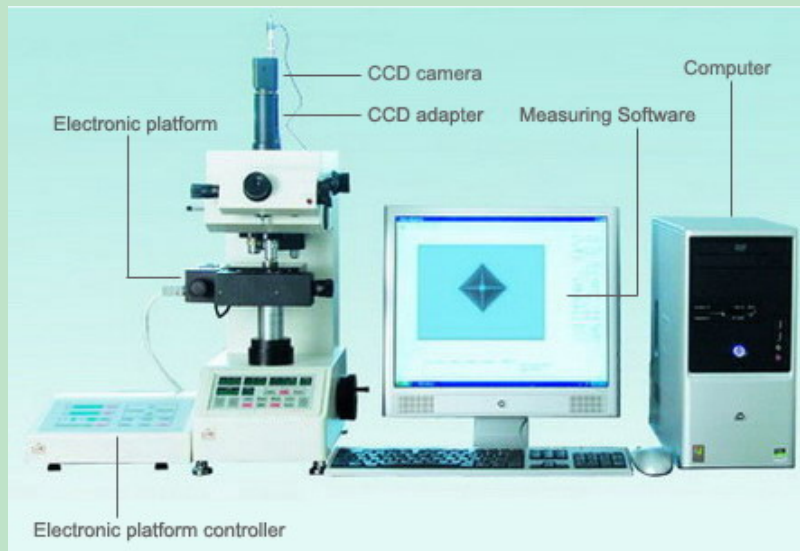
Optional Accessories:

- CCD adapter
- CCD camera
- Clamp
- Monitor
- Mini-printer
- Auto-turret
- Digital micro meter head

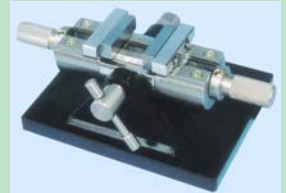
Auto Micro hardness tester SMHV1000ZK

Introductions:

SMHV1000ZK is auto micro hardness tester with precision on automatic electronic platform, digital eyepiece, CCD camera system and PC software system; it is an excellent instrument for the automatic micro hardness testing. SMHV1000ZK is equipped with Vickers and Knoop indenter simultaneously, it can be applicable to measure any micro hardness in the testing.



Mounting clamp



Unequal specimen clamp



Small bearing clamp



Thin-piece clamp

Technical Specifications:

Type \ Series	SMHV1000Z (single indenter)	SMHV1000ZK (double indenters)
Test force	gf: 10,25,50,100,200,300,500,1000	
Loading way	Digital control directly, preloading, loading and unloading automatically	
Dwell time	1-99 second can be setup	
Indenter, lens conversion	automatic conversion	
Platform	Motorized by PC software	
Specimen maxi height	90mmmm	
Eyepiece	Magnification: 10X	
	Reticle: Zero base line and sight line	
Lens	10X /40X	20X/40X
Indenter	HV indenter	HV and HK indenter
Measuring	HV measurement	HV and HK measurement
Specimen max-width	120mm	
Hardness conversion	HV transfer to HRC	
Light source	12V30W halogen bulb	
Measuring range	5-3000HV	
Accuracy	Standard conforms to EN-ISO 6507	
Dimension	490×250×395(height × width × depth) ;	
Weight	Approximate 43kg	
Power supply	AC220V/50HZ/60W; AC110V/60HZ/60W	
Standard delivery	XY anvil ; Thin specimen anvil ; Fork-shaped anvil ; Fine wire anvil; Level; Adjustable screw ; 10 ×eyepiece ; 20x and 40x objective; Micro Vickers hardness blocks (high and medium)	

Electronic Brinell hardness tester DHB3000A/HBE3000A

◇DHB3000A/HBE3000A Electronic Brinell Hardness Tester is a advanced product integrate the precision mechanical structure with the computer control by means of the mechanical and electrical circuit system. It adopts the motorized test force application without weight blocks, and uses 0.5% accuracy compression sensor and the CPU control system to compensate the test force lost automatically during the testing. The test force and the load dwell time can be directly setup in pressing the selected keys on the panel with reliable repetition, precise reading and easy operation.

Usage Range:

◇Brinell indentation is the largest indentation among all the hardness testing, it is able to reflect the comprehensive features of the material, and the testing is unaffected by the macrostructure and the compositional unevenness of the specimen, hence it is a reliable hardness testing with high precision. The Brinell hardness testing is widely used in such industrial fields as metallurgy, forging, casting, unhardened steel and nonferrous metals industries, as well as in the laboratories, colleges and scientific research institutes.



Technical Specifications:

Testing range	(8~650) HBW		
Test Force	612.9N (62.5Kgf) 、 980N(100Kgf)、 1226N(125Kgf)、 1839N(187.5Kgf)、 2452N(250Kgf)、 4900N(500Kgf)、 7355N (750Kgf) 、 9800N(1000Kgf)、 14700N(1500Kgf)、 29400N(3000kgf)		
Accuracy of Displayed Hardness Value			
Hardness Range(HBW)	Max tolerance%	Repetition%	
≤ 125	± 3	≤ 3.5	
125<HBW≤225	± 2.5	≤ 3.0	
> 225	± 2.0	≤ 2.5	
Max. Height of specimen	225mm		
Max. Distance from indenter center to instrument throat	135mm		
Magnification of microscope	20X		
Min Reading Grade of Drum wheel of the microscope	0.005mm		
Power supply	AC220V/50; 110V/60Hz		
Main Accessories	◇ One Large testing anvil		
	◇ One Small testing anvil		
	◇ One V-shaped testing anvil		
	◇ One Hard Alloyed Steel Ball Indenters: \varnothing 2.5mm		
	◇ One Hard Alloyed Steel Ball Indenters: \varnothing 5mm		
	◇ One Hard Alloyed Steel Ball Indenters: \varnothing 10mm		
	◇ One Microscope: 20X		
◇ Two Standard Hardness Blocks			

Digital Brinell hardness tester XHB3000A/HBS3000A

◇XHB3000A/HBS3000A Digital Brinell Hardness Tester is a advanced instrument integrates the technology of optical, mechanic and electrical and computer. It adopts the motorized testing force application without weight blocks and uses 0.5% accuracy compression sensor to compensate the test force lost automatically. The indentation is measured directly in the built-in 20x microscope sensor system, and the LCD screen indicates the indentation diameter and the hardness value. 17 different hardness testing comparison scales can be converted automatically by setup the panel. The load, dwell time and brightness of light can be adjusted on the panel, and an F/D2 selection table to make the operation ease.

◇The instrument is equipped with a RS232 serial interface, printer and date storage, it can be connected with PC for readout.

Usage Range:

◇Brinell indentation is the largest indentation among all the hardness testing, it is able to reflect the comprehensive features of the material, and the testing is unaffected by the macrostructure and the compositional unevenness of the specimen, hence it is a reliable hardness testing with high precision. The Brinell hardness testing is widely used in such industrial fields as metallurgy, forging, casting, unhardened steel and nonferrous metals industries, as well as in the laboratories, colleges and scientific research institutes.



Technical Specifications:

Testing range	(8~650) HBW		
Testing force	612.9N (62.5Kgf)、980N(100Kgf)、1226N(125Kgf)、1839N(187.5Kgf)、2452N(250Kgf)、4900N(500Kgf)、7355N (750Kgf)、9800N(1000Kgf)、14700N(1500Kgf)、29400N(3000kgf)		
Accuracy of Displayed Hardness Value			
Hardness Range(HBW)	Max. tolerance%	Repetition%	
≤ 125	± 3	≤ 3.5	
125 < HBW ≤ 225	± 2.5	≤ 3.0	
> 225	± 2.0	≤ 2.5	
Max. Height of specimen	225mm		
Max. Distance from indenter center to instrument throat	135mm		
Magnification of microscope	20X		
Min. Reading Grade of Drum wheel of the microscope	0.00125mm		
Power supply	AC220V/50; 110V/60Hz		
Main Accessories	◇ Anvil: Large, Small and V-shaped each		
	◇ One Hard Alloyed Steel Ball Indenters: ϕ 2.5mm		
	◇ One Hard Alloyed Steel Ball Indenters: ϕ 5mm		
	◇ One Hard Alloyed Steel Ball Indenters: ϕ 10mm		
	◇ One Microscope: 20X		
◇ Two Standard Hardness Blocks			

Portable Rockwell Hardness Tester PHR Series

- ◇ There are two basic types of Rockwell hardness testing: Standard and Superficial. Each requires a slightly different instrument construction.
- ◇ Standard testers read directly in these fifteen Rockwell scales: A, B, C, D, E, F, G, H, K, L, M, P, R, S, and V. Superficial models are for testing case-hardened stocks, thin stock and soft materials in the Rockwell N and T scales.
- ◇ Hardness Tester model numbers tell you up to three things.
- ◇ The first number is the thickness in inches the instrument can test.
- ◇ The second number is the throat depth in inches, or how far in from the edge of the material tests can be made.
- ◇ The letter "S" at the end tells you this is for Superficial testing on the N and T scales only. ("ST" indicates a unique model for thin and tube stock.)



PHR1S



PHR1ST



PHR14



PHR2
PHR2S



PHR42
PHR42S



PHR44



PHR84



PHR16



Bench Stand

Portable Rockwell Hardness Tester PHR Series

The tester model numbers show the maximum opening (dimension A), and throat depth (dimension B). The letters tell you the type of tester or specific application. "S" indicates a Superficial tester.

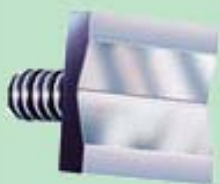
Model	Opening(A)	Depth(B)
PHR1	1"(25mm)	1"(25mm)
PHR1S	1"(25mm)	1"(25mm)
PHR14	1"(25mm)	4"(100mm)
PHR14S	1"(25mm)	4"(100mm)
PHR2	2"(50mm)	2"(50mm)
PHR2S	2"(50mm)	2"(50mm)
PHR42	4"(100mm)	2"(50mm)
PHR42S	4"(100mm)	2"(50mm)
PHR44	4"(100mm)	4"(100mm)
PHR84	8"(200mm)	4"(100mm)
PHR16	Diameter: <400mm	
PHR32	Diameter: <800mm	
PHR64	Diameter: <1600mm	



Standard equipment with each tester:

- ◇ 1 diamond penetrator
- ◇ 1 1/16" ball penetrator
- ◇ 3 test blocks, 2 hard steel, 1 brass.
- ◇ 1 flat anvil, 1 V anvil (additional anvils for some models)
- ◇ Extensions in appropriate sizes
- ◇ High-impact carrying case

ANVILS



V ANVIL

1/2"	#4210
1"	#4220
1-1/4"	#4230



CONVEX ANVIL

1/2"	#4410
3/4"	#4420
1"	#4430



CYLINDRICAL

1/2"	#4310
3/4"	#4320
1"	#4330



RAISED FLAT

1/8"	#4610
1/4"	#4620
Diamond	#4630



FLAT ANVIL

1/2"	#4110
1"	#4120

Penetrators



Diamond Penetrator



Ball Penetrator

Ball Penetrators

1/16"	Ball	#2210
1/8"	Ball	#2220
1/4"	Ball	#2230
1/2"	Ball	#2240

Diamond Penetrators

Standard	#2110
Superficial	#2120

Extensions



Extensions allow testing thinner items with larger tester models without sacrificing stability.

1/2"	#5100
3/4"	#5120
1"	#5130
2"	#5140

Hardness Blocks

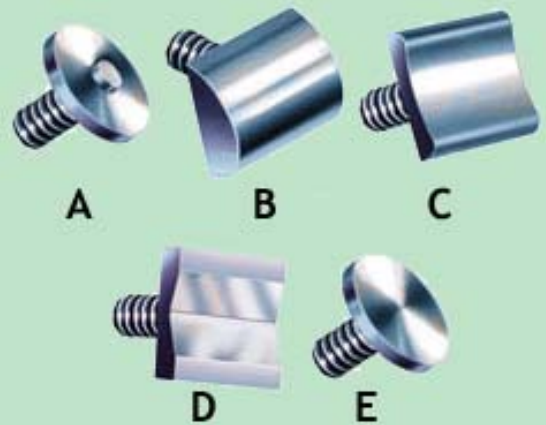


	Certified	
Hard Steel	(HRC64)	#1131
Soft Steel	(HRC33)	#1133
Brass	(HRB33)	#1121

Anvils

The correct anvil helps ensure valid readings by making sure work does not move during load buildup. Anvils are interchangeable.

- A - Raised flat for thin stock
- B - Convex for tube stock
- C - Round for larger round stock
- D - Vee for small round stock
- E - Standard Flat stock anvil



The positions of anvil and penetrator can be reversed for internal-surface testing.

Penetrators

For each scale, you need the correct penetrator. They are interchangeable.

Diamond Penetrators with 120° cone and spherical point.

Standard - for Standard Scales A, C, D

Superficial - for Superficial Scale N

Ball Penetrators

- 1/16" - for B, F, G, and T Scales
- 1/8" - for E, H, L, and W Scales
- 1/4" - for L, M, P, and Y Scales
- 1/2" - for R, S, V, and Y Scales



Bench Stand

Cast iron for solid support. Holds tester at convenient angle, freeing hands for ease of use. Internal fiber sleeve protects tester handle.

Weight: 5Kg.

#3100

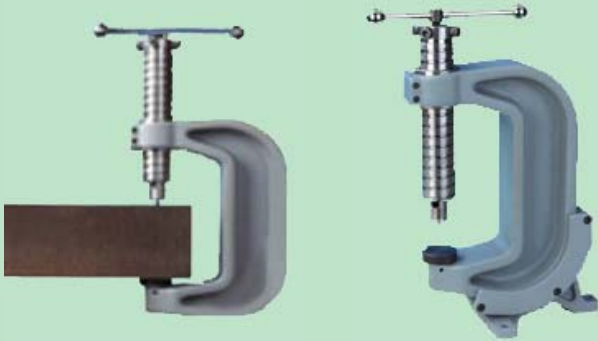


Portable Brinell Hardness Tester PHB series

◇ It's mainly used to test the hardness of metal products with big grains and uneven micro constructions, such as large-sized forgings, castings, rollers, or those parts that assembled, inconvenient to move or not allowed to be cut, and to test the hardness of nonferrous metals, annealed metal materials and most of steel raw materials.

◇ Compare to Leeb hardness tester, the Brinell hardness tester has higher precision, fewer factors that affect the testing accuracy, lower requirement on the surface roughness of work pieces. With F/D2 ratio of 30, the PHB tester has an equivalent test condition as the Brinell test with 3000kgf and 10mm ball indenter. The testing result meets requirements of common standards and do not need to be converted. Tensile strength (σ_b) can be gotten through conversion tables in Brinell reading.

Portable Brinell Hardness Tester PHB150 & PHB300



PHB150

PHB300

Technical Specifications:

Model	PHB150	PHB300
Opening Size	150×100mm	300×150mm
Net Weight	4.2Kg	7.5Kg

Portable Brinell Hardness Tester PHB0.5



Feature and Applications:

Small volume, convenient for carrying, easy operation.

Precision conforms to ISO 6506-2 and ASTM E10

It can determine the Brinell hardness of ferrous, non-ferrous metals and tensile strength of steel products. It is especially suitable to determine the Brinell hardness of large heavy parts on the spot

Specifications:

Measuring range: < Measuring range: 100-400HBS;

Impact capacity: 4.9J;

Dimensions: $\Phi 55 \times 370$ mm

Weight: approx. 3.5kg

Hammer Hitting Type Portable Brinell Hardness Tester PHBHB



Feature and Applications:

Small volume, convenient for carrying, easy operation

It can determine the Brinell hardness of ferrous, non-ferrous metals and tensile strength of steel products. It is especially suitable to determine the Brinell hardness of large heavy parts on the spot

Specifications:

Measuring range: < 450 HBS;

Diameter of steel ball: $\Phi 10$ mm;

Dimensions: $\Phi 25 \times 110$ mm

Weight: approx. 0.5kg

Portable Webster Hardness Tester W Series

W Series Webster Tester is a portable instrument which can on-site test soft metals quickly. The Webster Hardness Tester is used to inspect the result of heat treatment, to sort the materials in the warehouse, and to test the long work pieces inconvenient taken to the lab. The Webster hardness tester is very suitable for quality inspection of batch products one by one in the production field. The hardness value can be read directly on the indicator dial.

W20 Webster Hardness Tester is the choice of virtually every aluminum extrusion manufacturer. This first hardness tester specially crafted for aluminum has improved the aluminum industry.

A test can be completed by one press.

Model W20 equivalent to Model B Tester

Models for testing brass, copper and mild steel respectively

Modification models for testing thick pieces or slim tubings

Tests sheets, extrusions, pipes; Very fast, very simple and very portable

Small indentation;

Conforms to ASTM B647;

Recommended in YS/T420.



Aluminum Alloys W20
Copper Alloys WB75
Copper Alloys WBB75
Mild Steel WB92



Aluminum Alloys W20a



Aluminum Alloys W20b
Copper Alloys WB75b
Copper Alloys WBB75b

Technical Specifications:

Product	Model	Capacity	Net Weight	Applications
Webster Hardness Tester for Aluminum Alloys	W20	Thickness: 0.4 – 6 mm, Inner Diameter: >10mm	0.5Kg	regular type for aluminum alloy profile, pipe and sheet
	W20a	Thickness: 0.4 – 13 mm, Inner Diameter: >10mm	0.5Kg	thick wall aluminum alloy material
	W20b	Thickness: 0.4 – 8 mm, Inner Diameter: >6mm	0.5Kg	aluminum alloy pipe of small diameter and aluminum alloy
Webster Hardness Tester for Copper Alloys	WB75	Thickness: 0.4 – 6 mm, Inner Diameter: >10mm	0.5Kg	extra-hard aluminum, brass
	WB75b	Thickness: 0.4 – 8 mm, Inner Diameter: >6mm	0.5Kg	slim extra-hard aluminum or brass pipe
	WBB75	Thickness: 0.4 – 6 mm, Inner Diameter: >10mm	0.5Kg	copper and soft copper alloys such as annealed brass
	WBB75b	Thickness: 0.4 – 8 mm, Inner Diameter: >6mm	0.5Kg	copper or annealed brass pipe
Webster Hardness Tester for Mild Steel	WB92	Thickness: 0.4 – 6 mm, Inner Diameter: >10mm	0.5Kg	soft steel materials not exceeding 230 HV, such as cold rolled sheet, hot rolled sheet and galvanized sheet etc.

Portable Barcol Durometer 9341

The Barcol durometer is an indentation hardness tester. The operation is easy, quick and almost non-destructive. The test is as simple as one press. It is a convenient tool for testing the hardness of aluminum, aluminum alloys and fiber reinforced plastics, which conforms to American Standard ASTM B648.

Application:

Barcol Hardness Tester is mainly used to test the hardness of aluminum and aluminum alloys, to test the hardness of other soft metals and glass fiber reinforced plastic products. It can also be used to test the hardness of extra large, extra wide, extra thick work pieces, and to test the hardness of boards, belt materials, section materials, forgings and castings etc.

Barcol Hardness Tester is commonly used as supplement of Webster Hardness Testers. It is usually used when test the hardness of pure aluminum, low hard aluminum alloys and extra large, extra thick materials.



Advantage:

It is small and light, easy to take.

It is very easy to operate without any experience, in any occasion.

It has extensive testing range, from very soft pure aluminum to very hard aluminum alloys, the testing range equal to 25~150HB.

High-sensitivity. Webster Hardness tester only has 20 scales, but Barcol has 100 scales. So Barcol Hardness tester has much higher sensitivity.

It does not need a bench stand. Barcol Hardness Tester is put on one side of the work pieces without bench stand.

Disadvantage:

The surfaces of work pieces need to be broad and flat. It is inconvenient to test the hardness of strips, small-sized pieces or work pieces with curved surfaces.

There will be conversion error. When testing the hardness of aluminum section materials, the Barcol hardness need to be changed into Webster hardness, but there is 2.7 HW discrepancy between Barcol conversion table and GB Standard YS/T420-2000, so the Barcol conversion table should be used cautiously.

Standard package:

- 1 Tester
- 2 Standard testing blocks
- 1 Calibration wrench
- 2 Spare penetrators

Optional accessories:

- Standard testing block
- High: 87-89
- Low: 43-45
- Spare penetrators

Portable Leeb hardness tester and accessories

Introduced:

- ◇ Wide measuring range. Based on the principle of Leeb hardness testing theory. It can measure the Leeb hardness of all metallic materials.
- ◇ Large screen, showing all functions and parameters. With EL background light
- ◇ Test at any angle, even upside down.
- ◇ Direct display of hardness scales HRB, HRC, HV, HB, HS, HL
- ◇ Seven impact devices are available for special application. Automatically identify the type of impact device.
- ◇ Large capacity memory could store 500 groups (Relative to average times 32 ~ 1) information including single measured value, mean value, testing date, 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.
- ◇ Software calibration function; Software to connect with PC via USB port.
- ◇ Compact metal case, suitable for use under poor working conditions
- ◇ Continuous working period of no less than 50 hours with two alkaline batteries(AA size); Auto power off to save energy.

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



HL200A



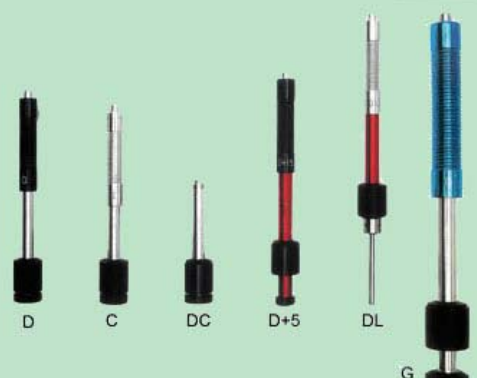
MH210A



MH180A



MH182A



Impact device

Outline:

Item	No.	Item	Quantity	Remarks
Standard delivery	1	Main body	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	Manual	1	
	7	Instrument case	1	
Optional Accessories	8	Cleaning brush (II) (For use with G type impact device)		
	9	Other type of impact devices and support rings		
	10	Data Program software		
	11	Communication cable		
	12	Mini-Printer with cable (MH210A、MH180A、MH182A)		

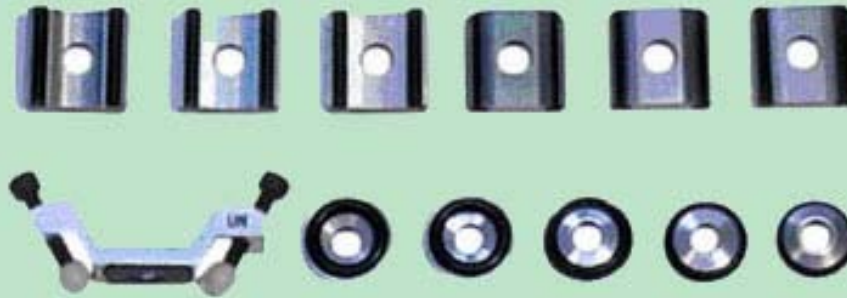
Technical specification of Optional Impact Devices:

Impact Devices		D / DC / DL	D+ 15	C	G
Impacting energy		11Nmm	11Nmm	3Nmm	90Nmm
Mass of impact body		5.5g/5.5g/7.3g	7.8g	3.0g	20g
Test tip	Hardness & Material	1600HV & Tungsten carbide			
	Diameter	3mm			5mm
Impact body	Diameter	20mm			30mm
	Length	147 / 86mm	162mm	141mm	254mm
	Weight	75 / 50gr	80gr	75gr	250gr
Max. hardness of work-piece		940HV	940HV	1000HV	650HB
Preparation of surface	Roughness class	N7	N7	N5	N9
	Max. roughness	10μm	10μm	2.5μm	30μm
	Average roughness	2μm	2μm	0.4μm	7μm
Min. weight of sample	Of compact shape	5kg	5kg	1.5kg	15kg
	On solid support	2kg	2kg	0.5kg	5kg
	Coupled on plate	0.1kg	0.1kg	0.02kg	0.5kg
Min. thickness of sample	coupled	3mm	3mm	1mm	10mm
	Min. thickness of hardened layers	0.8mm	0.8mm	0.2mm	-
Size of indentation of spherical test	With 300HV	Diameter	0.54mm	0.54mm	0.38mm
		Depth	24μm	24μm	12μm
	With 600HV	Diameter	0.45mm	0.45mm	0.32mm
		Depth	17μm	17μm	8μm
	With 800HV	Diameter	0.35mm	0.35mm	0.30mm
		Depth	10μm	10μm	7μm

Technical Specifications:

Impact device	Hardness value	Error of value	Repeatability
D	760±30HLD / 530±40HLD	±6 / ±10 HLD	6 / 10 HLD
DC	760±30HLDC / 530±40HLDC	±6 / ±10 HLDC	6 / 10 HLD
DL	878±30HLDL / 736±40HLDL	±12 HLDL	12 HLDL
D+15	766±30HLD+15 / 544±40HLD+15	±12 HLD+15	12 HLD+15
G	590±40HLG / 500±40HLG	±12 HLG	12 HLG
E	725±30HLE / 508±40HLE	±12 HLE	12 HLE
C	822±30HLC / 590±40HLC	±12 HLC	12 HLC

- ◇ Measuring range: 170~960HLD; Measuring direction: 0~360°
- ◇ Hardness Scale: HL、HB、HRB、HRC、HRA、HV、HS
- ◇ Display: segment LCD
- ◇ Data memory: max. 100 groups (relative to impact times 32~1)
- ◇ Working power: 3V (2 AA size alkaline batteries)
- ◇ Continuous working period: about 100 hours (With backlight off)
- ◇ Communication interface: RS232
- ◇ Working temperature: 0°C ~ +40°C; Storage temperature: -30°C ~ +60°C
- ◇ Relative humidity: ≤90%
- ◇ Dimensions & Weight: 132 X 76.2 mm/345g (HL200A/MH210A) ;
150 X 74 X 32 mm/245g(MH180A、MH182A)



Support Rings

Technical specification of Optional Support Rings:

Type	Sketch of non-conventional supporting ring	Remarks
Z10-15		For testing cylindrical outside surface R10~R15
Z14.5-30		For testing cylindrical outside surface R14.5~R30
Z25-50		For testing cylindrical outside surface R25~R50
HZ11-13		For testing cylindrical outside surface R10~R15
HZ12.5-17		For testing cylindrical outside surface R10~R15
HZ16.5-30		For testing cylindrical outside surface R10~R15
K10-15		For testing spherical inside surface SR10~SR15
K14.5-30		For testing spherical inside surface SR14.5~SR30
HK11-13		For testing spherical inside surface SR11~SR13
HK12.5-17		For testing spherical inside surface SR12.5~SR17
HK16.5-30		For testing spherical inside surface SR16.5~SR30
UN		For testing cylindrical outside surface, radius adjustable R10

Analogue Shore Durometer LX series

LXA durometer is an essential characteristic of various rubber, elastomers and plastic products. It is feature portability, ease of operation, with facility, high resolution and it is available in GB/T 531 -1999 and ISO 7619. It can be used in SLX hardness test stand.

LXC durometer is an essential characteristic of various foam, sponge and so on. It is feature portability, ease of operation, with facility, high resolution and it is available in HG/T2489-93.

LXD durometer is an essential characteristic of various hard rubber, colophony, glass, print board, fiber and so on. It is feature portability, ease of operation, with facility, high resolution and it is available in GB/T 531 -1999.

The durometer test stand is R&D for Shore A, C, and D Durometer. The test stand construction includes operating handle, adjusted glass stage, die poise, clip beam of durometer and carrick column. The shore hardness testing will be more accurate with the stand.



LXA



LXC



LXD



Rubber Test Stand

Technical Specifications:

Model	LXA	LXC	LXD
Test range	0-100 HA	0-100 HW	0-100 HD
Available test range	10-90 HA	10-90 HW	10-90 HD
Stroke	2.5 mm		0~2.5 mm
Tip dimension	0.79mm	SR2.5mm	SR0.1mm
Dimension & Net weight	115x60x25mm & 0.5kg		

Digital Shore Durometer HT6510 series



HT6510A / HT6510D



HT6510C

Technical Specifications:

- ◇ Test scale: shore hardness
- ◇ Standard: DIN53505, ASTM D2240, ISO7619, JISK7215
- ◇ Parameters: hardness result, average value, maxes. value
- ◇ Measurement range: 0-100HA(HD) (A/D); 0-100HC (C)
- ◇ Measurement deviation: < 1%H; Resolution: 0.1
- ◇ Communication interface: RS232C
- ◇ Operating conditions: 0°C to 40°C
- ◇ Power supply: 4x1.5V AAA (UM-4) battery, Auto switch off
- ◇ Battery indicator: low battery indicator
- ◇ Dimensions & Weight: 162x65x38mm & 173g (no probe)
- ◇ Standard delivery: Instrument, test block, English manual and carrying case

Surface roughness testers SRT6200/6210

It is compatible with four standards of site to measure surface roughness of various machinery-processed parts, calculate corresponding and clearly display all measurement parameters. When measuring the roughness of a surface, the sensor is placed on the surface and then uniformly slides along the surface by driving the mechanism by the sharp built-in probe. This roughness causes displacement of the probe which results in change of inductive amount of induction coils so as to generate analogue signal, which is in proportion to the surface roughness at output end of phase-sensitive rectifier. The exclusive DSP processes and calculates and then outputs the measurement results on LCD.

- ◇ Multiple parameter measurement: Ra, Rz, Rq, Rt
- ◇ Highly sophisticated inductance sensor
- ◇ Four wave filtering methods : RC, PC-RC, GAUSS and D-P
- ◇ Built-in lithium ion rechargeable battery and control circuit with high capacity
- ◇ Small in size, light in weight and easy to use
- ◇ Can communicate with PC computer for statistics, printing and analyzing by the optional cable and the software for RS232C interface.



SRT6210

- ◇ Manual or automatic shut down. The tester can be switched off by pressing the Power key at any time. On the other hand, the tester will power itself off about 5 minutes after the last key operation.
- ◇ The tester can memorize 7 groups of measurement results and measuring conditions for later use or download to PC.; Metric / Imperial Conversion. (SRT6210)

Technical Specifications:

Model	SRT6200	SRT6210
Display	4 digits, 10 mm LCD, with blue backlight	
Parameters	Ra, Rz	Ra, Rz, Rq, Rt
Measuring Range	Ra, Rq: 0.005-10.00um / 1.00-400.0uinch	Ra,Rq: 0.005-16.00um / 0.020-629.9uinch
	Rz, Rt: 0.020-100.0um / 0.078-4000uinch	Rz,Rt: 0.020-160.0um / 0.078-6299uinch
Accuracy	Not more than 10%; Fluctuation of display value: Not more than 6%	
Test Principle	Inductance type	
Radius of Probe Pin	5um	
Material of Probe Pin	Diamond	
Dynamo-measurement of Probe	16mN(1.6gf)	4mN(0.4gf)
Probe Angle	90	
Vertical Radius of Guiding Head	48mm	
Maximum driving stroke	17.5mm/0.7inch	
Cutoff length (l)	0.25mm / 0.8mm / 2.5mm optional	
Evaluation length	1--5cut off optional	
Driving speed	<a.> sampling length = 0.25mm Vt=0.135mm/s <b.> sampling length = 0.8mm Vt=0.5mm/s <c.> sampling length = 2.5mm Vt=1mm/s <d.> returning Vt=1mm/s	
Profile digital filter	<a.> Filtered Profile: RC; <b.> Filtered Profile: PC-RC; <c.> Filtered Profile: Gauss; <d.> Non-Filtered Profile: D-P	
Power Li-ion battery	rechargeable	
Operating conditions	Temperature: 0~50°C; Humidity <80%	
Dimension & Net weight	140x57x48 mm (5.5x2.2x1.9 inch) & about 420 g	

Coating thickness gauge CM Series

Principle	Application	Tested materials.
(F Type) Magnetic induction	Can measure the thickness of non-magnetic coating layers on magnetic substrate	Such as: (aluminum, chrome, copper, enamel, rubber, paint) on magnetic substrate (steel, iron, alloy and magnetic stainless steel)
(NF Type) Eddy current	Can measure the thickness of nonconductive coating layers covered on nonferrous substrate	Such as: (enamel, rubber, paint, varnish, plastic anodic-oxide layer) covered on nonferrous substrate (aluminum, brass, zinc, tin and nonmagnetic stainless steel)



CM8828



CM8825FN



CM8826FN

Technical Specifications:

Specifications	Model	CM8825 in built probe(s)			CM8828	
		CM8826 with separate probe(s)				
Operating principle	F Type	CM8825FN / CN8826FN			(F & NF)	
	NF Type	(F & NF)	(only NF)	(only F)		
Measuring range	0-1250um/0-50mil (default range)					
Resolution	0.1/1					
Accuracy	±1-3%n or ±2.5um					
Min. radius work piece	F: Convex 1.5mm / Concave 25mm					
	N: Convex 3mm / Concave 50mm					
Min. measuring area	6mm					
Min. sample thickness	0.3mm					
Battery indicator	low battery indicator					
Metric/ imperial	convertible					
Power supply	4x1.5V AAA(UM-4)battery; Auto switch off					
Operating conditions	Temperature: 0--45°C (32°F --104°F), Humidity≤90%RH					
Dimensions & weight	126x65x27mm & 81g(not including battery)					
Standard delivery	Main unit	1				
	F Type probe	1		1	1	
	N Type probe	1	1		1	
	F Calibration base set	1		1	1	
	N Calibration base set	1	1		1	
	Calibration foil set	1 set (4 foils)			--	
	Carrying case	B04				
	Instruction manual	1				
Optional accessories	Cable & software for RS-232C					



CM8829FN



CM8829

Technical Specifications:

Specifications	Model	CM8829 (please specify probe type, in built or separate while ordering)		
Operating principle	F Type	CM8829FN	CN8829N	CN8829F
	NF Type	(F & NF)	(only NF)	(only F)
Measuring range		0-1250um/0-50mil (default range)		
Resolution		0.1/1		
Accuracy		±1-3%n or ±2.5um		
Min. radius work piece		F: Convex 1.5mm / Concave 25mm		
		N: Convex 3mm / Concave 50mm		
Min. measuring area		5mm		
Min. sample thickness		0.3mm		
Battery indicator		low battery indicator		
Metric/ imperial		convertible		
Power supply		4x1.5V AAA(UM-4)battery;		
		Auto switch off		
Operating conditions		Temperature: 0-45°C (32°F --104°F)		
		Humidity ≤90%RH		
Dimensions		124x62x30mm		
Weight (not including battery)		115g (CM8829) 200g (CM8829FN)		
Standard delivery	Main unit	1		
	F Type probe	1		1
	N Type probe	1	1	
	F Calibration base set	1		1
	N Calibration base set	1	1	
	Calibration foil set	1 set (4 foils)		
	Carrying case	B04		
Instruction manual	1			
Optional accessories		Cable & software for RS-232C, other ranges		



CM8823



CM8821



CM8822

Technical Specifications:

Specifications	Model	CM8822	CM8821	CM8823
			CM8822F	CM8822N
Operating principle		(F & NF)	(only F)	(only NF)
Measuring range		0-1000um/0-40mil (default range)		
Resolution		0.1/1		
Accuracy		±1-3% <i>n</i> or ±2.5um		
Min. radius work piece		F: Convex 1.5mm / Concave 25mm		
		N: Convex 3mm / Concave 50mm		
Min. measuring area		6mm		
Min. sample thickness		0.3mm		
Battery indicator		low battery indicator		
Metric/ imperial		convertible		
Power supply		4x1.5V AAA(UM-4)battery;		
		Auto switch off		
Operating conditions		Temperature: 0--40°C (32°F --95°F)		
		Humidity: 10--90%RH		
Dimensions		160x68x32mm		
Weight (not including battery)		250g		210g
Standard delivery	Main unit (1000um)	1		
	F Type probe	1	1	
	N Type probe	1		1
	F Calibration base set	1	1	1
	N Calibration base set	1		1
	Calibration foil set	1 set (4 foils)		1foil
	Carrying case	B01		
Instruction manual	1			
Optional accessories	Other range: 0--200um to 15000um			

Ultrasonic thickness gauge MT200 / MT160 / MT150

MT series of digital ultrasonic thickness gauge is based on the same operating principles as SONAR, the MT200 and MT160 is capable of measuring the thickness of various materials with accuracy as high as 0.01 millimeters, or 0.001 inches. It is suitable for a variety of metallic and non-metallic materials.

Main Functions:

- ◇ Capable of performing measurements on a wide range of material, including metals, plastic, ceramics, composites, epoxies, glass and other ultrasonic wave well-conductive materials.
- ◇ Four transducer models are available for special application, including for coarse grain material and high temperature applications.
- ◇ Probe-Zero function, Sound-Velocity-Calibration function
- ◇ Two-Point Calibration function. Two work modes: Single point mode and Scan mode.
- ◇ Coupling status indicator showing the coupling status.
- ◇ Battery information indicates the rest capacity of the battery.
- ◇ Auto sleep and auto power off function to conserve battery life.
- ◇ Optional software to process the memory data on the PC. Optional thermal mini-printer to print the measured data via RS232 port. (MT200 / MT160 / MT150)



MT200



MT160 / MT150

Technical Specifications:

Model	MT200	MT160	MT150
Display	128×64 dot matrix LCD with EL backlight		4.5 digits LCD with EL backlight.
Measuring Range	0.75~300mm (in Steel)		
Sound Velocity Range	1000~9999 m/s		
Resolution	0.1/0.01mm (selectable)		0.10mm
Accuracy	± (0.5%Thickness+0.04) mm, depends on materials and conditions		
Units	Metric / English unit selectable		
Communication	RS232 serial port		
Power Supply	Two "AA" size, 1.5 volt alkaline batteries. 100 hours typical operating time (EL backlight off)		
Dimensions	132 x 76.2 x 35 mm	150×74×32 mm	
Weight	345g	245g	

- ◇ Four measurements readings per second for single point measurement, and ten per second for Scan Mode.
- ◇ Memory for 20 files (up to 99 values for each file) of stored values.
- ◇ Upper and lower limit can be preset. It will alarm automatically when the result value exceeding the limit.

Ultrasonic thickness gauge TM Series



TM-8810



TM-8811



TM-8812

Technical Specifications:

Model	TM8810	TM8811	TM8812
Measuring range	1.5-200mm,0.06-8inch		1.2-225mm,0.05-9inch
Operating principle	Ultrasonic		
Materials measured	steel, cast iron, aluminum, red copper, brass, zinc, quartz glass, polyethylene, PVC, gray cast iron, nodular cast iron		
Sound velocity	500-9000m/s		
Lower limit steel pipes	φ15x2.0mm, φ20x3.0mm determined by the transducer		
Calibration block	included		
Resolution	0.1mm		
Accuracy	±(0.5%n+0.1)		
Power supply	4x1.5vaa(UM-3) battery		
Battery indicator	low battery indicator		
Operating conditions	Temperature: 0-+45°C (32°F -104°F); Humidity ≤90%RH		
Dimensions	160x68x32mm		120x62x30mm
Weight	208g(not including battery)		164g

Many thanks for your kind reading!

ASEL

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