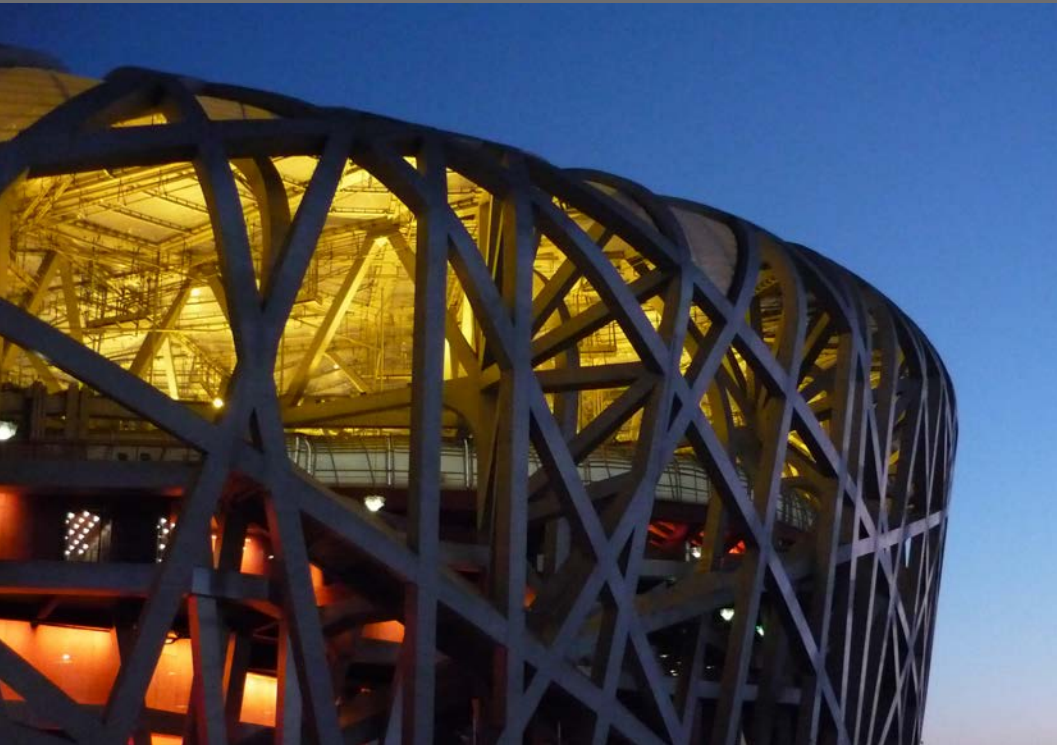


SIS

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A professional manufacturer in Quality Control & NDT fields



Since 1993



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New HARTIP 2200™

**A Unique Wireless Probe
Metal Hardness Tester**

Company Profile



Source Industrial Supply supplies industrial test and measurement, inspection and evaluation instruments. The products we sell are versatile commonly used industrial type instruments such as electronic multimeter, infrared inspection cameras for fault locating, hardness testers for evaluating mechanical properties of materials, metallurgical microscopes, precision digital balance...etc. We offer you brand name high quality equipment for the list price or lower. Our products are mostly hand held or desktop. Most of our equipment is in stock. Regardless of your location on earth, we ship within a few days to your door. You can order online using options such as credit cards using our PayPal account, wire transfer, certified check or money order. If you would like to speak to us before making a decision or if you have any questions, all you need is to call us and one of our seasoned instrumentation engineers will help you.

Contents

HARTIP HARDNESS TESTER	1
SADT HARTIP2000/HARTIP2000 D&DL	1
SADT HARTIP2200	2
SADT HARTIP1900	3
SADT HARTIP1800/HARTIP1800 D&DL	4
SADT HARTIP1800B/HARTIP1800B D&DL	5
SADT HARTIP 3000	6
SADT HARTIP1500/HARTIP1000	7
ULTRASONIC THICKNESS GAUGE	8
SADT SA40+/SA40	8
SADT SA40EZ/ST5900	9
ULTRASONIC FLAW DETECTOR	10
SADT GT SERIES GLOSS METER	12
SADT GM SERIES GLOSS METER	13
SADT GT60 PLUS GLOSS METER	14
COLOR DIFFERENCE METER	15
SC80 Precise colorimeter	15
SC50/SC30 Precise colorimeter	16
SC20 Portable colorimeter	17
SADT ROUGHNESS TESTER	18
SADT Roughness Tester RoughScan	18
SADT Roughness Tester SR200	19
METALLURGICAL MICROSCOPE	20
SADT SM500	20
SADT SM-3/XD200/XD601	21
SADT SM400/SD100M	22
SADT SD300M	23
HB SCALER Brinell Measuring System	23
BENCH HARDNESS TESTER	24
Rockwell Hardness Tester	24
Superficial Rockwell	25
Plastic Rockwell Hardness Tester	25
Vickers Hardness Tester	26
Digital Vickers Hardness Tester	27
Micro Vickers Hardness Tester	28
Brinell Hardness Tester	29
Superficial Rockwell & Vickers	29
Brinell, Rockwell & Vickers	29
SADT M SERIES PORTABLE	
ROCKWELL HARDNESS TESTER	30
SADT CONCRETE TEST HAMMER	31
HT-225D/HT-75D/HT-20D	31
HT-225A/HT-75/HT-20	32
HT-1000	33
EMT220 VIBRATION METER	34

UNIVERSAL ANGLE HARDNESS TESTER

HARTIP2000/HARTIP2000 DL™

HARTIP2000 is an innovative portable Leeb hardness tester with our new patent technology, which makes HARTIP 2000 a universal angle (UA) impact direction hardness tester. It is no need to set up impact direction when taking measurement by any angle. Therefore, HARTIP 2000 offers a linear accuracy comparing to the angle compensating method. HARTIP 2000 is also a cost saving hardness tester and has many other features.

HARTIP2000 DL is equipped with SADT unique D and DL 2-in-1 probe. ●



Universal Angle

Advantages

- ✦ Universal impact direction mode, it does not need to setup different impact direction, it will be recognized automatically
- ✦ High accuracy: $\pm 2HL(0.3\% @ HL800)$
- ✦ Linear accuracy for any angles
- ✦ No compensation for impact direction
- ✦ Dual values (Leeb value and one conversion value) can be displayed at the same screen
- ✦ Big LCD display with backlight
- ✦ Ten testing materials including forged steel,
- ✦ It has strength conversion value
- ✦ RS232 and blue tooth interface, it can connect micro-printer directly by cable or wireless
- ✦ 300 data for memory
- ✦ Customer re-calibration allowed
- ✦ Power off automatically
- ✦ More economic and more convenient to use

Specifications

SADT HARTIP 2000/HARTIP2000 D&DL		Standard Package
Principle	Leeb hardness measurement	HARTIP 2000(DL) main unit
Accuracy	$\pm 0.3\% @ HL=800$, Repeatability: $\pm 2HL$	Impact device DU/D-DL 2-in-1*
Display	Digital LCD with backlight	Test block D
Hardness scale	HL/HRC/HRB/HB/HV/HS/ob	Small support ring
Measuring range	HL170-960/ HRC17-70/ HRB13-109/ HB20-655/ HV80-940 / HS32-99.5 / ob(rm)255-2639N/mm ²	Cleaning brush
Impact device	DU / D-DL 2-in-1* DL, D+15, G, C (optional)	Operation manual
Impact direction	Universal angle (UA) type	Test Certificate
Materials	10 common metal materials	Carrying case
Memory	300 data can be stored and re-readable	Optional accessories
Statistics	Calculated automatically	Bluetooth/RS232 Micro printer
Re-calibration	Allowed by user	Probe DU/DL/D+15/G/C
Indicator	Low battery	Standard big support ring for probe
Communication interface	RS232 to micro-printer Bluetooth (optional) to bluetooth micro-printer	Standard small support ring for probe
Auto power off	Auto	Impact body D
Power supply	1.5V AA alkaline battery x 2	Carbide ball tip D
Working environment	-10~+45°C	Test block D/G without certificate
Dimension (mm)	127x66x29	Test block D/G with certificate
Net weight (g)	240	Bluetooth Module
Standards	Conforming to ASTM A956, DIN 50156, GB/T 17394-1998	

*: D-DL 2-in-1 probe is only available for HARTIP2000 DL.

R/F PROBE HARDNESS TESTER

HARTIP2200™

The HARTIP 2200 is an innovation of HARTIP series portable hardness tester. It works with a wireless RF impact device (probe). The RF impact device (probe) can transfer measuring value to main unit wirelessly via RF module within the range of 10 meters. The measuring data also can be printed out wirelessly via micro-printer. Furthermore, It does not need to setup impact direction manually. The main unit with LCD display can be placed around anywhere. So one person is OK for operation. With RF probe, you would be far away from the bother which caused by the broken cable of tester.

There is a rechargeable Li-ion battery inside the RF probe and can be charged directly by USB port of PC or mobile phone charger. ●



Portable Hardness Tester

Standard package

HARTIP 2200

HARTIP 2200 main unit	1
R/F impact device D	1
Test block D	1
Small support ring	1
Cleaning brush	1
Charger	1
Charging cable	1
Operation manual	1
Test certificate	1
Carrying case	1

Optional accessories

R/F impact device DC	
R/F impact device DL	
R/F impact device C	
R/F impact device D+15	
Wireless micro printer	
Special support rings	
Standard big support ring for probe	
Small support ring for probe	
Impact body D	
Carbide ball tip D	
Test block D with certificate	
Test block D w/o certificate	

Advantages

- ★ R/F wireless probe
- ★ Universal impact direction mode, it does not need to setup different impact direction, it will be recognized automatically
- ★ High accuracy: $\pm 2HL(0.3\% @ HL800)$
- ★ Linear accuracy for any angles
- ★ Different probe can be identified automatically
- ★ Dual values (Leeb value and one conversion value) can be displayed at the same screen
- ★ Big LCD display with backlight
- ★ It can connect micro-printer wirelessly
- ★ 400 data for memory
- ★ Customer re-calibration allowed
- ★ Power off automatically
- ★ More economic and more convenient to use

Specifications

SADT HARTIP 2200	
Principle	Leeb hardness measurement
Accuracy	$\pm 0.3\% @ HL=800$, Repeatability: $\pm 2HL$
Display	Digital LCD with backlight
Hardness scale	HL/HRC/HRB/HB/HV/HS/ob
Measuring range	HL170-960/ HRC17-69/ HRB13-101.7/ HB20-655/ HV80-940 / HS32-99.5 / ob(rm)255-2180N/ mm ²
Impact device	r/f wireless probe D / DC / DL / C / D+15
r/f communication distance	10m in space
r/f frequency	2.4GHz
Impact direction	Universal angle (UA) type
Materials	10 common metal materials
Memory	400 data can be stored and re-readable
Statistics	Calculated automatically
Re-calibration	Allowed by user
Indicator	Low battery
Communication interface	Wireless micro-printer
Auto power off	Auto
Power supply	1.5V AA alkaline battery x 2 (main unit) / 3.7V Li-ion rechargeable battery (wireless probe)
Working environment	-10~+40°C
Dimension (mm)	124x67x30
Net weight (g)	240
Standards	Conforming to ASTM A956, DIN 50156, GB/T 17394-1998

PORTABLE HARDNESS TESTER HARTIP1900



Standard package

HARTIP 1900

HARTIP 1900 main unit	1
Impact device G(internal)	1
Test block G	1
Small support ring	1
Cleaning brush	1
Li-ion rechargeable battery (internal)	1
Bluetooth module(internal)	1
Data managing software	1
USB cable	1
charger	1
Operation manual	1
Test certificate	1
Carrying case	1

Optional accessories

Bluetooth micro printer (powered by rechargeable battery)
RS232 microprinter(powered by rechargeable battery)
Special support rings
Standard support ring for probe G
Small support ring for probe G
Impact body G
Carbide ball tip G(made in Switzerland)
Test block G with certificate
Test block G without certificate
Charger
European adapter plug

HARTIP 1900 is a portable integrated Leeb hardness tester that is specially designed to measure hardness of castings in HL (Leeb), HRB (Rockwell B), HB (Brinell). It has more impact energy (90N) and large contact tip (dia.5mm) than normal. Therefore it can make test on machined surface or even roughness surface instead of polished or finished surface. It is widely used for measuring hardness of large castings or raw materials at spot.

The HARTIP 1900 can make test at any angle without making setup for different impact direction. All readings can be downloaded to computer or printed out to micro-printer wirelessly by Bluetooth. ●

KEY FEATURES

- + Rugged and Integrated design in aluminium housing
- + Universal impact direction, it does not need to setup different impact direction, it will be recognized automatically
- + Dual hardness scales on display
- + Four viewing orientation
- + Shifting between large view & batch view
- + Statistics value display automatically
- + Upper or lower limit reminder
- + High contrast OLED display
- + Bluetooth interface for wireless transmission
- + Li-ion rechargeable battery
- + Abundant memory

Specifications

Model	SADT HARTIP 1900
Principle	Leeb hardness measurement
Accuracy	±4HLG
Display	High contrast OLED
Hardness scale	HL/HRB/HB
Measuring range	HLG300-750 / HRB47-100 / HB90-650
Impact device	G
Materials	Steel/Cast Steel, Lamellar Iron, Nodular Iron, Cast Aluminum
Memory	360000 data in 400 blocks, can be saved and re-readable
Statistics function	Average / Max. / Min. / S. value
Re-calibration	Allowed by user
Indicator	Low battery
Interface	USB or Bluetooth
Power on/off	Auto
Power supply	Rechargeable Li-ion battery charged by USB port or charger
Working environment	-40°C~+70°C
Dimension (mm)	255x37x48
Net weight (g)	150
Standards	Conforming to ASTM A956, DIN 50156, GB/T 17394-1998

PORTABLE HARDNESS TESTER HARTIP1800 / D&DL

HARTIP1800 is an advanced state-of-the-art palm sized metal hardness tester with many new features. Using our patent technology, SADT HARTIP1800 is a new generation product. It has high accuracy: ± 2 HL (or 0.3% @HL800) with high contrast OLED display and wide environment temperature (-40°C - 70°C). Apart from huge memories in 400 blocks with 360k data, HARTIP1800 can download measuring data to PC and printout to micro-printer by USB port and wirelessly with internal wireless module. The battery can be charged simply from USB port, also it has a customer re-calibration and statistics function. ●

HARTIP1800 D&DL is equipped with two-in-one probe. With unique two-in-one probe, HARTIP1800 D&DL can convert between probe D and probe DL simply by changing impact body. It's more economic than buying them individually. It has the same configuration with HARTIP1800 except two-in-one probe. ●



ADVANTAGES

- + Integrated design , easy operation
- + Universal impact direction, it does not need to setup different impact direction, it will be recognized automatically
- + Digital with high contrast OLED display
- + Wide operating environment: -40°C - 70°C
- + High accuracy: ± 2 HL (or 0.3% @HL800)
- + Dual values(Leeb value and one conversion value) can be displayed at the same screen
- + Two display modes: single value shown in big letter or multi-values shown in batch
- + Screen view displays in four different directions, more convenient to view
- + Huge memories, data can be recalled easily
- + it can connect to computer by USB or wirelessly
- + USB and wireless interface, it can connect micro-printer directly by cable or wirelessly
- + Customer re-calibration allowed
- + 3.7 V Li-ion rechargeable battery , it can be charged by USB or power source
- + Statistics value can be calculated automatically
- + With strength conversion value
- + Power on/off automatically
- + Packed in rigid carrying case



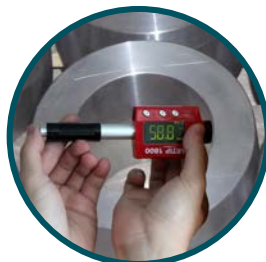
With internal wireless module, HARTIP1800/D&DL can print measuring data wirelessly

Applications

Normal display



Flip display



Upright display



Portable Hardness Tester

Standard package

HARTIP 1800 / D&DL

HARTIP 1800 main unit	1
Internal impact device D(for 1800)	1
2-in-1 impact device D/DL(for 1800 D&DL)	1
Test block D	1
Cleaning brush	1
3.7 V Li-ion rechargeable battery (internal)	1
Wireless module(internal)	1
Wireless micro printer	1
Charger	1
USB cable	1
Data managing software	1
Operation manual	1
Test Certificate	1
Carrying case	1

Optional accessories

- Wireless micro printer (powered by rechargeable battery)
- Micro printer(powered by rechargeable battery)
- Special support rings
- Standard support ring for probe D
- Small support ring for probe D
- Impact body D
- Carbide ball tip D
- Test block D with certificate
- Test block D w/o certificate
- European adapter plug



Software for HARTIP1800/1800B



Standard package - HARTIP1800

PORTABLE HARDNESS TESTER HARTIP1800B / D&DL

Standard package

HARTIP 1800B/1800B DL

HARTIP 1800B main unit	1
Impact device D(1800B)	1
2-in-1 impact device D/ DL(1800B D&DL)	1
Test block D	1
Cleaning brush	1
3.7 V Li-ion rechargeable bat- tery (internal)	1
Charger	1
USB cable	1
Operation manual	1
Test certificate	1
Carrying case	1

Optional accessories

- Wireless micro printer (powered by rechargeable battery)
- Micro printer (powered by rechargeable battery)
- Special support rings
- Standard support ring for probe D
- Small support ring for probe D
- Impact body D
- Carbide ball tip D
- Test block D with certificate
- Test block D w/o certificate
- European adapter plug



Standard package -
HARTIP1800B

HARTIP1800B is a basic model for HARTIP1800. With most of core functions of HARTIP1800 and lower price, HARTIP1800B is a good choice for the customer who has the limited budget. HARTIP1800B also can be equipped with our unique D/DL two-in-one impact device. ●



KEY FEATURES

- ★ Integrated design , easy operation
- ★ Universal impact direction mode, impact direction can be recognized automatically or setup manually
- ★ High accuracy - $\pm 0.3\%$ @ HL=800 / Repeatability: $\pm 2HL$
- ★ Wide operating environment - $-40\sim+70^{\circ}C$
- ★ Digital with high contrast OLED display
- ★ Screen view displays in four different directions, more convenient to view
- ★ 4000 data memory in 4 blocks, data can be recalled easily
- ★ it can connect to computer by USB or wirelessly
- ★ RS232 and wireless interface, it can connect micro-printer directly by cable or wirelessly (wireless connection is an option)
- ★ 3.7 V Li-ion rechargeable battery , it can be charged by USB or power source
- ★ With strength conversion value
- ★ Re-calibration allowed by user
- ★ Power on/off automatically

Specifications

Model	SADT HARTIP 1800 /1800 D&DL	SADT HARTIP 1800B /1800B D&DL
Principle	Leeb hardness measurement	
Accuracy / Repeatability	$\pm 0.3\%$ @ HL=800 / $\pm 2HL$	
Display	High contrast OLED	
Hardness scale	HL/HRC/HRB/HB/HV/HS/HRA/ob	
Measuring range	HL170-960 / HRC17-70 / HRB13-109 / HB20-655 / HV80-940 / HS32-99.5 / HRA30-88 / ob(rm)255-2639N/mm ²	
Impact device	D/ D-DL 2-in-1 (internal)*	
Materials	11 common metal materials	10 common metal materials
Memory	99 blocks, 999 data for each block , can be saved and re-readable	4 blocks, 999 data for each block , can be saved and re-readable
Statistics function	Average / Max. / Min. / S. value	
Re-calibration	Allowed by user	
Indicator	Low battery	
Interface	USB/wireless to PC for transferring data or printing, USB for charging	USB to PC for transferring data or printing, USB for charging
Power on/off	Auto	
Power supply	3.7V Li-ion rechargeable battery	
Working environment	$-40^{\circ}C\sim+70^{\circ}C$	
Dimension (mm)	148x44x22	
Net weight (g)	110	
Standards	Conforming to ASTM A956, DIN 50156, GB/T 17394-1998	

*: D-DL 2-in-1 probe is only available for DL models.

PORTABLE HARDNESS TESTER HARTIP 3000

HARTIP 3000 is an advanced hand-held digital metal hardness tester with characters of high accuracy, wide measuring range and easy operation. It is suitable for testing the hardness of all metals especially on site for large structure or assembled components, which is widely used in the industry of power, petrochemistry, air space, vehicle, machine and so on.

Specifications



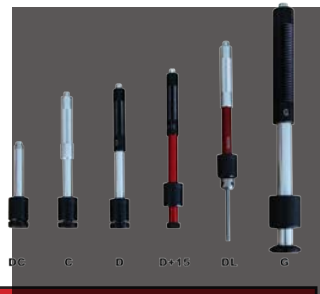
SART HARTIP 3000			
Principle	Leeb hardness measurement	Indicator	Low battery
Accuracy	±0.5% @ HL=800 / ±4HL	Communication	RS232/USB to PC for transferring data
Display	Large graphic LCD with EL backlight	Print	RS232/USB to micro printer
Hardness scale	HL/HRC/HRB/HB/HV/HS	Power supply	1.5V AA battery x 4
Measuring range	HL200-960/ HRC19-70/ HRB13-109/ HB20-655/ HV80-1027/ HS31.9-102.8	Working environment	-10~+45°C
Impact device	D (Standard) DC/D+15/C/G/E/DL (Optional)	Dimension (mm)	195x84x38
Materials	9 common metal materials	Net weight (g)	550
Memory	960 data in 8 blocks, can be saved and re-readable	Standards	Conforming to ASTM A956, DIN 50156, GB/T 17394-1998
Statistics function	Average / Max. / Min. / S. value		

KEY FEATURES

- + Wide measuring range: Rockwell B&C, Brinell, Vickers, Shore and HL
- + Automatic conversion to Brinell, Rockwell, Vickers and Shore
- + Test in any directions
- + Impact devices: D, DC, DL, C, D+15, E, G
- + All impact devices interchangeable
- + Menu operation
- + Large LCD display with backlight
- + RS232/USB interface to PC and micro-printer
- + Automatic mean, max., min. value display
- + Data management software

Key Accessories

Special Support Rings	Size(mm)	Description
Z10-15 Z14.5-30 Z25-50	20x20x7.5 20x20x6.5 20x20x6.5	Cylindrical R10-15mm R14.5-30mm R25-50mm
HZ11-13 HZ12.5-17 HZ16.5-30	20x18x5 20x20x5 20x20x5	Hollow-cylindrical R11-13mm R12.5-17mm R16.5-30mm
K10-15 K14.5-30	Ø20x7.7 Ø20x6.7	Spherical R10-13mm R14.5-30mm
HK11-13 HK12.5-17 HK16.5-30	Ø17x5 Ø18x5 Ø20x5	Hollow-spherical R11-13mm R12.5-17mm R16.5-30mm
UN	Ø52x20x16	Universal



Optional Probes	
D	Universal standard unit. For the majority of hardness testing assignments.
DC	Extremely short impact device. Use in very confined spaces.
DL	Needle front section diameter 2.78mm, length 50mm. Measurements in extremely confined spaces.
C	Reduced impact energy. Test in surface hardened or impact sensitive components.
D+15	Particularly slim front section and with measuring coil moved back. Hardness measurements in grooves and on recessed surfaces.
E	Synthetic diamond test tip. For measurements in the extremely high hardness range.
G	Enlarged test tip, increased impact energy. For measurements in the Brinell range only. Use in solid components.

Portable Hardness Tester

Standard package

HARTIP 3000 main unit	1
Impact device type D	1
Small support ring	1
Test block D	1
Cleaning brush	1
Operation manual	1
Test Certificate	1
Carrying case	1

Optional accessories

- Mirco-printer
- Connection cable to PC
- RS232-USB adaptor
- Data managing software
- Impact device D
- Impact device DC
- Impact device D+15
- Impact device G
- Impact device C
- Impact device DL
- Impact body D/DC
- Impact body D+15
- Impact body G
- Impact body C
- Impact body DL
- Test block G / D with certificate
- Test block G / D w/o certificate
- Special support rings
- Leather case



Mirco Printer for HARTIP3000/HARTIP2000



Software for HARTIP3000

PORTABLE HARDNESS TESTER HARTIP 1500/1000

Standard package

HARTIP 1500

HARTIP 1500 main unit	1
Built in impact device D	1
Test block D	1
Cleaning brush	1
Charger	1
Operation manual	1
Test Certificate	1
Carrying case	1

Optional accessories

Special support rings
Standard big support ring for probe D
Standard small support ring for probe D
Impact body D
Test block D with certificate
Test block D without certificate
Leather pouch

Standard package

HARTIP 1000

HARTIP 1000 main unit	1
Built in impact device D	1
Leather pouch	1
Operation manual	1
Test Certificate	1

HARTIP 1500/1000 is an integrated handheld metal hardness tester that combines impact device (probe) and processor into one unit. The size is much shorter than normal impact device, which lets HARTIP 1500/1000 can meet not only normal measurements, but can take measurements at narrowed space as well. HARTIP 1500/1000 is suitable for testing hardness of almost all Ferrous and Nonferrous materials. With our new technology, its accuracy is improved to a higher level than normal type. HARTIP 1500/1000 is one of the most economic hardness testers. ●



KEY FEATURES

- ✦ Rugged and modular design
- ✦ High accuracy
- ✦ Palm size for narrow space
- ✦ Built-in impact device
- ✦ For all metallic materials
- ✦ Wide measuring range: Rockwell B&C, Brinell, Vickers, Shore and HL
- ✦ Test in any directions
- ✦ Comply to standard ASTM A956, DIN 50156, GB/T 17394-1998

Specifications

Model	SADT HARTIP 1500	SADT HARTIP 1000
Principle	Leeb hardness measurement	
Accuracy	±0.4% @ HL=800 / ±3HL	±HRC0.5
Display	LCD with backlight	
Hardness scale	HL/HRC/HRB/HB/HV/HS	HL/HRC
Measuring range	HL170-960/ HRC17-70/ HRB13-109/ HB20-655/ HV80-940/ HS32-99.5	HL170-960/ HRC17-70
Impact device	D (Internal)	
Materials	9 common metal materials	Steel/Cast steel
Memory	99 data	-
Statistics function	Average / Max. / Min.	-
Re-calibration	Allowed by user	-
Indicator	Low battery	
Auto power off	Auto	
Power supply	9V alkaline battery x 1	
Working environment	-10~+45°C	
Dimension (mm)	100x60x33	
Net weight (g)	150	
Standards	Conforming to ASTM A956, DIN 50156, GB/T 17394-1998	



ULTRASONIC THICKNESS GAUGE

SA40+/SA40

SA40+ / SA40 are the miniaturized ultrasonic thickness gauges that can measure wall thickness and velocity.

Our intelligent gauges are designed to measure the thickness of metallic and nonmetallic materials such as steel, aluminum, brass, silver and etc. They are quite versatile model which can be easily equipped with the low & high frequency probes as well as a high temperature probe. ●



Using new technique of multiple echo(echo-to-echo), SA40+ can measure wall thickness under paint. For a normal ultrasonic thickness gauge, you must remove paint on work piece, but with new SA40+, you can take measurement directly over the paint of work piece and you can get real thickness value of work piece. SA40+ has two measuring modes: normal mode and multiple echo(MEC) mode. By normal mode, SA40+ is a normal ultrasonic thickness gauge; by MEC mode, SA40+ can measure over coatings. ●

Specifications

Model	SA40+	SA40
Display	4 digits LCD	
Backlight	Yes	
Measuring range	0.70~300.0mm in steel with PT-5 probe (Normal mode) 3.00~40.00mm in steel Thickness for coating: <1.2mm (MEC mode)	0.7~300.0mm in steel with PT-5 probe
Resolution	0.01mm@0.70~99.99mm, 0.1mm@100.0~300.0mm	
Accuracy	0.70~9.99mm ±0.05mm / 10.00~99.99mm ±(0.5%+0.01)mm 100.0~300.0 ±(1%+0.1)mm	
Unit	mm/inch	
Velocity	1000~9999m/s	
Coupling indicator	Yes	
Calibration	Auto	
Memory	400 data	
Low battery indicator	Yes	
Working environment	0~40°C, 20~90%RH	
Power off	Auto	
Power supply	AA battery x 2	
Dimension (mm)	127x66x29	
Net weight (g)	240	
Standard probe	PT-5	
Optional probes	XT-5 / GT-5 / CT2.5	

Ultrasonic Thickness Gauges

Standard package -

SA40+/SA40

SA40+/SA40 main unit	1
Standard 5MHz probe PT-5 with probe holder	1
Built-in calibration block	1
Coupling paste for normal temperature	1
Test certificate	1
Operation manual	1
Carrying case	1

Optional probes

XT-5 probe
GT-5 probe
CT-2.5 probe
PT-5 probe with probe holder
Coupling paste for high temperature



ULTRASONIC THICKNESS GAUGE SA40EZ/ST5900

SA40EZ is a miniaturized ultrasonic thickness gauge that can measure wall thickness and velocity. Our intelligent gauges are designed to measure the thickness of metallic and nonmetallic materials such as steel, aluminum, brass, silver and etc. It is quite versatile model which can be easily equipped with the low & high frequency probes as well as a high temperature probe.



ST5900 is a miniaturized ultrasonic thickness gauge that can measure wall thickness. It has a fixed velocity 5900 m/s, which is used only for measuring of wall thickness of steel.

Specifications

Model	SA40EZ	ST5900
Display	4 digits LCD	
Backlight	Yes	-
Measuring range	0.7~300.0mm in steel with PT-5 probe	1.2~200.0mm in steel with PT-5 probe
Resolution	0.1mm	
Accuracy	0.7~99.9mm ±(0.5%+0.1)mm 100.0~300.0mm ±(1%+1)mm	1.2~99.9mm ±(0.5%+0.1)mm 100.0~200.0mm ±(1%+1)mm
Unit	mm	
Velocity	1000~9999m/s	5900m/s
Coupling indicator	Yes	-
Calibration	Auto	Manual
Memory	400 data	-
Low battery indicator	Yes	-
Working environment	0~40°C, 20~90%RH	
Power off	Auto	
Power supply	AA battery x 2	AAA battery x 1
Dimension (mm)	127x66x29	107x60x15
Net weight (g)	240	100
Standard probe	PT-5	
Optional probes	XT-5 / GT-5 / CT2.5	-



Optional Probes

Probe	Frequency	Diameter	Measuring Range	Application
PT-5 (Standard)	5MHz	Ø10mm	0.8~250.0mm	For standard applications
XT-5 (Optional)	5MHz	Ø7mm	0.8~30mm	For tubes with small diameter
GT-5 (Optional)	5MHz	Ø12mm	3.0~100mm	For high temperature up to 400°C
CT-2.5 (Optional)	2.5MHz	Ø12mm	3.0~250mm	For unfavorable attenuation cast

Standard package -

SA40EZ

SA40EZ main unit	1
Standard 5MHz probe PT-5 with probe holder	1
Built-in calibration block	1
Coupling paste for normal temperature	1
Test certificate	1
Operation manual	1
Carrying case	1

Optional probes

XT-5 probe
GT-5 probe
CT-2.5 probe
PT-5 probe with probe holder
Coupling paste for high temperature

Standard package -

ST5900

ST5900 main unit	1
Standard 5MHz probe PT-5	1
Built-in calibration block	1
Leather case	1
Operation manual	1

Optional probe

PT-5 probe

ULTRASONIC FLAW DETECTOR

SUD10/SUD50

SUD series ultrasonic flaw detectors are portable, microprocessor-based instruments that are suitable for both shop and field use. They are integrated with international advanced digital integration and new EL display technology, are smart Digital Ultrasonic Flaw Detector propelled by SADT. SUD series flaw detectors have almost all functions to meet requirements of professional application for nondestructive testing. SUD50 is a more portable model with better functions.



SUD10



SUD50

Key Features

- ✓ Automated gain and gain scan;
- ✓ Peak Hold and Peak Memory;
- ✓ DAC, AVG, B scan, AWS
- ✓ TCG curve
- ✓ High-speed capture and very low noise
- ✓ Automated make video of test process and play. Use USB flash disk, the length of video is unlimited.
- ✓ High contrast viewing of the waveform from bright, direct sunlight to complete darkness and easy to read from all angles
- ✓ Automated display precise flaw location (Depth d, level p, distance s, amplitude, sz dB, Ø);
- ✓ Automated switch three staff gauge (Depth d, level p, distance s);
- ✓ Automated calibration of transducer Zero-point, Angles, Front edge and material Velocity;
- ✓ Convenient to make and use DAC/TCG and AVG to evaluate the echo, the curve can be modified and compensated
- ✓ 6dB DAC functions;
- ✓ 100 independence setup, any criterion can be input freely, we can work in the scene without test block;
- ✓ Big memory of 1000 A graph
- ✓ Big memory of 300 A graph and 30000 thickness values
- ✓ Li battery, continue working time up to 10 hours;
- ✓ The embedded software can be online updated;
- ✓ Display freeze;
- ✓ Automated echo degree;
- ✓ Angles and K-value;
- ✓ Lock and unlock function of system parameters;
- ✓ Electronic clock calendar;
- ✓ Two gates setting and alarm indication;
- ✓ Gate and DAC alarm;
- ✓ Automated measurement of nodularity and vermicularity
- ✓ RS232/USB port, Communication with PC is easy
- ✓ Powerful pc software and reports can be export to excel
- ✓ Pulse parameteres can be adjusted
- ✓ Dormancy and screen savers
- ✓ Solid metal housing (IP65)

Ultrasonic Flaw Detector

Standard package

Main unit	1
2.5MHz-Ø20 straight probe	1
4MHz 60° 8x9mm angle probe	1
Probe cable (Q9 to Q9)	1
Probe cable (Q9 to C5)	1
4A/9V power adapter	1
Data managing software	1
Interface cable	1
Test certificate	1
Operation manual	1
Carrying case	1

Optional accessories

Standard block V-1 (IIW1)	
Standard block V-2 (IIW2)	
Probe cable Q9-Q9	
Probe cable Q9-C5	
Probe cable C9-Q9	
Probe cable C9-C5	
Lithium ion battery	

Optional probes

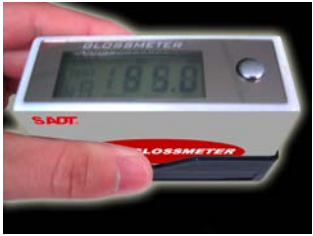
5MHz, 6x6mm, 45°
 5MHz, 6x6mm, 60°
 5MHz, 6x6mm, 70°
 2MHz, 8X9mm, 45°
 2MHz, 8X9mm, 60°
 2MHz, 8X9mm, 70°
 4MHz, 8X9mm, 45°
 4MHz, 8X9mm, 60°
 4MHz, 8X9mm, 70°
 2MHz, 14X16mm, 45°
 2MHz, 14X16mm, 60°
 2MHz, 14X16mm, 70°
 4MHz, 14X16mm, 45°
 4MHz, 14X16mm, 60°
 4MHz, 14X16mm, 70°
 2MHz, 20X22mm, 45°
 2MHz, 20X22mm, 60°
 2MHz, 20X22mm, 70°
 4MHz, 20X22mm, 45°
 4MHz, 20X22mm, 60°
 4MHz, 20X22mm, 70°
 2MHz, 12mm, 0°
 4MHz, 12 mm, 0°
 2MHz, 20mm, 0°
 4MHz, 20 mm, 0°
 0.5MHz, 24mm, 0°
 1MHz, 24 mm, 0°
 2MHz, 24mm, 0°
 4MHz, 24 mm, 0°
 2MHz, 12 mm, 0° DUAL
 4MHz, 12 mm, 0° DUAL
 2MHz, 20 mm, 0° DUAL
 4MHz, 20 mm, 0° DUAL
 2MHz, 24 mm, 0° DUAL
 4MHz, 24 mm, 0° DUAL
 4MHz, 3x10mm, 45°, FD=10mm
 4MHz, 3x10mm, 60°, FD=8mm
 4MHz, 3x10mm, 70°, FD=6mm

Specifications

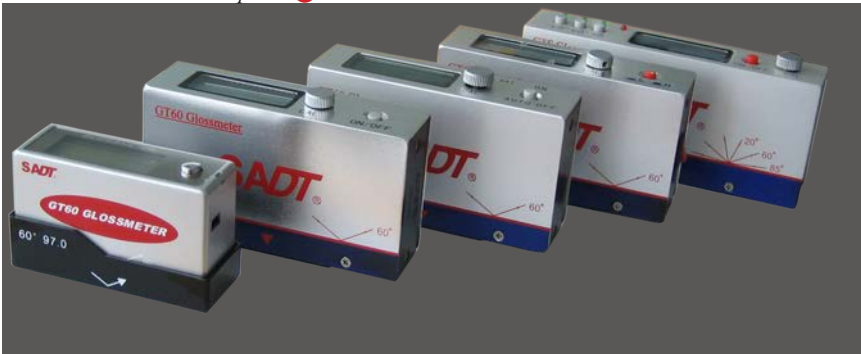
Model	SUD10	SUD50
Measuring range (mm)	0.5~10000	
Frequency range (MHz)	0.5~20	
Pulse shift (μs)	-20~+3400	
Vertical linearity error	≤2.5%	≤3%
Horizontal linearity error	≤0.1%	
Gain (dB)	0~120	
Zero (μs)	0.0~99.99	
Material velocity	1000~15000 m/s	
Sensitivity margin	≥60dB	≥62dB
Dynamic scope	≥32dB	≥34dB
Measurement mode	single, dual, THRU	
Reject	0~80%	
Port type	BNC(Q9)	
Memory	300	1000
Independence setup	100	
sz, dB, Ø	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Peak hold and Peak memory	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B scan	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DAC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
AVG	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
TCG	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Predefined standards (13)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Automated calibration (IIW)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6dB DAC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Make video	5 min	Unlimited
PC software	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Online update	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Curved surface correction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
AWS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pulse energy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pulse width	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Gate alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DAC alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Continue working time	10h	12h
Display	LED True Color	
Support	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Wrist strap	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Operating temperature	-20~55°C	
Dimension	240mm×180mm×50mm	238mm×160mm×48mm
Net weight	1.8kg	1.0kg
Standards	JB/T 10061-1999, JJG 746-2004	

GLOSS METER

SADT GT SERIES



GT series gloss meters are designed and manufactured according to international standards ISO2813, ASTM D523, DIN67530 and China standards GB9754, GB9966, GB/T3891. The technical parameters is up to JJG696-2002. The GT45 gloss meter is especially designed for measuring plastic film and porcelain enamel. The GT60S gloss meter is especially designed for measuring small areas and curvy surfaces. GT60L is especially designed for measuring stone materials. GTS+, GT60+ and GT60NT are intelligent models equipped with a USB port for data export. ●



Specifications

Model	GTS	GTS Plus	GT60	GT60 Plus	GT60N	SGT60	GT60S	GT45	GT60L
Application	Paint, coating, printing, ceramics, metal	Paint, coating, printing, ceramics, metal, plating layer	Paint, coating, printing, ceramics, metal	Paint, coating, printing, ceramics, metal	Paint, coating, printing, ceramics, metal, plating layer	Paint, coating, printing, ceramics	Small area, curvy surface	Plastic, porcelain enamel	Marble, Granite, Terrazzo
Measuring Range(Gu)	20°: 0~200 60°: 0~1000 85°: 0~160	0~1999	0~1000	0~1000	0~1999	0~199.9	0~199.9		0~199
Readout Error(Gu)	±1.2	±0.5 (0~99.9) ±0.5% (100~1999)	±1.2	±0.5 (0~99.9) ±0.5% (100~1000)	±0.5 (0~99.9) ±0.5% (100~1999)	±1.2	±1.2		±2
Repeatability	±0.4	±0.2 (0~99.9) ±0.2% (100~2000)	±0.4	±0.2 (0~99.9) ±0.2% (100~1000)	±0.2 (0~99.9) ±0.2% (100~1999)	±0.4	±0.4		±1
Aperture (mm)	20°, 60°, 85°		60°					45°	60°
Measurement Spot (mm)	10×10 @ 20° 10×20 @ 60° 8×30 @ 85°		10×20				2×2	10×14	25×50
Window Size (mm)	11×52	11×38	14×28				∅4	14×20	26×52
Memory	-	10 data for each degree	-	10 group of data			-		
Communication Interface	-	USB	-	USB			-		
Software	-	My Gloss	-	My Gloss			-		
Power Supply	1.5V AA				1.5V AAA		1.5V AA		
Dimension (mm)	143×32×64	144×32×64	114×32×64		83×46×30	114×32×64			
Net Weight(g)	390	380	285	280	100	180	285		
Standards	ISO2813, ASTM D523, DIN-67530, ISO7668, GB/T9754, GB/T7706, GB/T9966.6					ISO2813, ASTM D523, DIN-67530, GB/T9754	ISO2813, ASTM D523, GB/T11420, T9754	ASTM-C346, ASTM2767, GB/T11420, GB/T8807, GB/T3295	ISO2813, ASTM D523, GB/T9966-5

Gloss Meter

Standard package -

Gloss Meter GT Series

GT Gloss meter main unit	1
Standard board	1
Lens cloth	1
Test certificate	1
Operation manual	1
Carrying case	1
USB cable (only for for GTS Plus /GT60 Plus/GT60N)	1
PC software (only for for GTS Plus/GT60 Plus/GT60N)	1

Standard package -

Gloss Meter SGT60

SGT60 Gloss meter main unit	1
Standard board(Ceramics)	1
Lens cloth	1
Operation manual	1
Pouch	1



SGT60



Standard boards for GTS



GTS GT60 GT60 Plus

GLOSS METER GMS/GM60

G M Series gloss meters are designed and manufactured according to international standards ISO2813, ISO7668, ASTM D523, ASTM D2457 and China standards GB/T9754, GB/T13891, GB/T7706 and GB/T8807. The technical parameters is up to JJG696-2002. GM Series gloss meters can be widely used to measure painting, coating, plastic, ceramics, leather products, paper, printing, floor materials and so on. ●



Standard package - Gloss Meter GM Series

GM Gloss meter main unit	1
Standard board	1
USB cable	1
Data software	1
Power adapter	1
Operation manual	1
Carrying case	1

Optional accessories

SD card
Bluetooth module

KEY FEATURES

- ✦ Precision appearance design, more suitable for human characteristic, easy to use.
- ✦ Three-angle gloss data is displayed simultaneously, can satisfy various requirements. (Only for GMS)
- ✦ Large memory for measurement data.
- ✦ Latest Bluetooth function and removable memory card to transmit data conveniently.
- ✦ Special designed gloss software to analysis data and output.
- ✦ Prompt for low battery and full memory.

With internal Bluetooth module (only available for GMS) or USB interface, GM gloss meter can transfer data with PC easily. The measuring data also can be exported to printer via printing interface. Optional SD card makes the memory as large as you want.



Specifications

Model	GMS	GM60
Application	Painting, printing, floor material, plastic, ceramics, leather, hardware, plating	
Measuring Range(Gu)	0~120, 120~2000 @ 20° 0~120, 120~1000 @ 60° 0~120, 120~160 @ 85°	0~120, 120~1000 @ 60°
Readout Error(Gu)	±1.5 (0~120) ±1.5%(120~2000)	±1.5 (0~120) ±1.5%(120~1000)
Repeatability	±0.5 (0~120) ±0.5%(120~2000)	±0.5 (0~120) ±0.5%(120~1000)
Aperture (mm)	20°, 60°, 85°	60°
Measurement Spot (mm)	10×10 @ 20° 9×15 @ 60° 5×38 @ 85°	9×15
Memory	900 data or 30 groups, CF card (optional)	
Interface	USB / printer /Bluetooth (Bluetooth is only available for GMS)	
Software	Data managing software	
Power Supply	+5V, AA*4	
Working Environment	10~40°C, <85%RH,	
Dimension (mm)	164×58×88	
Net Weight(g)	520	
Standards	ISO2813, ISO7668, ASTM D523, ASTM D2457, GB/T9754, GB/T13891, GB/T7706, GB/T8807	



Standard package
-- GMS/GM60

GLOSS METER

SADT GT60 PLUS

G T60 Plus gloss meters are designed and manufactured according to international standards ISO2813, ASTM D523, DIN67530 and China standards GB9754, GB9966, GB/T3891. The technical parameters is up to JJG696-2002. The GT60 Plus gloss meter is an intelligent model equipped with a USB port for data export. It is designed for measuring the gloss of paint coatings, plastics, ceramics and metal surfaces. ●



Gloss Meter

Standard package -

Gloss Meter GT60 PLUS

GT Gloss meter main unit	1
Standard board	1
USB cable	1
PC Software	1
Lens cloth	1
Test certificate	1
Operation manual	1
Carrying case	1

KEY FEATURES

- ✦ Small and light, easy to be carried and used
- ✦ One 1.5V alkaline battery can be used for almost 60 hours and 100,000 readings
- ✦ Auto calibration
- ✦ Wide measuring range: 0-1000Gu
- ✦ Statistics mode
- ✦ USB data transfer, plug and play, easy to make report by PC software

Specifications

Model	GT60 Plus
Application	Paint, coating, printing, ceramics, metal
Measuring Range(Gu)	0~99.9 100~1000
Readout Error(Gu)	±0.5 (0~99.9) ±0.5%(100~1000)
Repeatability	±0.2 (0~99.9) ±0.2%(100~1000)
Aperture (mm)	60°
Measurement Spot (mm)	10×20
Window Size (mm)	14×28
Memory	10 group of data
Communication Interface	USB
Software	My Gloss
Power Supply	1.5V AA
Dimension (mm)	114×32×64
Net Weight(g)	280
Standards	ISO2813, ASTM D523, DIN-67530, ISO7668, GB/T9754



PRECISE COLORIMETER SC80

SC80 precise colorimeter is mainly applied to plastic, painting, design, plating, costume, printing and dyeing industries.. It can do the color analysis and color controlling. ●



KEY FEATURES

- + The 2.4" colorful screen and portable design make you feel comfortable.
- + Suitable for internal, external color evaluation and data control.
- + High precision measurement, stable performance.
- + PC software for data management.
- + National measurement accreditation.
- + USB data transmit
- + Yellow, whiteness measurement



Specifications

Model	SC80
Accuracy	0.08 (average value of 30 times @ the standard white tabula)
Lighting/Inspecting system	8/d (8o falloff/diffuse reflection) SCI (include flat mirror light)
Light source	White light source , halogen lamp
Inspection angle	10° angle of view in CIE
Measuring conditions	D65
Rectification	White board rectification/Black board rectification
Storage	100 samples and 100 data groups for each sample
Display	L*a*b*, L*c*h*, ΔE*ab, XYZ, with respect to RGB, Δ(L*a*b*), Δ(L*c*h*) Whiteness: Hunter Whiteness, Ganz Whiteness Yellowness: Yellowness index
Communication interface	USB2.0, printer(optional)
Aperture (mm)	Ø8
Power supply	4 pcs of AA alkaline batteries or nickel batteries special adaptor (DC, 5V)
Weight (g)	550g
Dimension (mm)	77x86x210

Standard accessories



Standard white tabula Standard black cavity Power adapter USB cable Software CD

Optional accessory



Micro printer

Precise Colorimeter

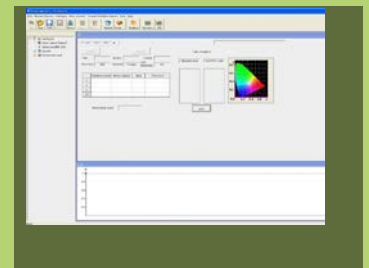
Standard package

SC80 main unit	1
Standard white tabula	1
Standard black cavity	1
USB cable	1
Software CD	1
Power adapter	1
Operation manual	1
Bag	1

Optional accessory

Micro Printer

COLOR TEST
and quality management
Software



PRECISE COLORIMETER SC50/SC30



Standard package - SC50

Main unit	1
Calibration plate	1
USB cable	1
Software CD	1
Power adapter	1
Operation manual	1
Bag	1
Carrying case	1

Standard package - SC30

Main unit	1
USB cable	1
Software CD	1
Power adapter	1
Operation manual	1
Bag	1
Carrying case	1

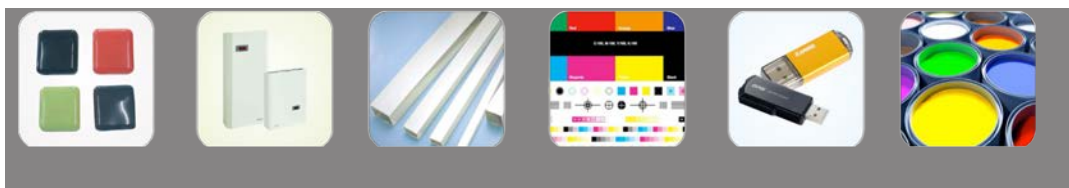
Optional accessory

Micro Printer

SC50/SC30 is developed according to international CIE1931, 1976 and other relevant standards and national standards, it is a new economic and practical general colorimeter equipped with the latest imported LED light source and sensor, which make it stable, durable, and economy. The menu-oriented interface that makes operation simple and easy to understand. SC50/SC30 is not only widely used on Quality department about the color difference, but also used on the school teaching, scientific research, and color design. ●

KEY FEATURES

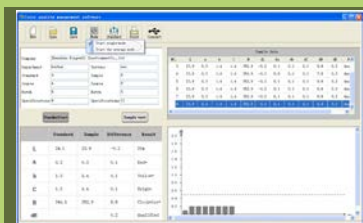
- ✦ Button & menu operation, easy to understand, reasonable price.
- ✦ Commonly used of two measurement modes: Lab&Lch, easy to switch measurement.
- ✦ Automatically display the color difference between the sample and standard sample, also display the color trend degree.
- ✦ Practical of the average measurement mode, uneven surface also can measure.
- ✦ The color difference software can analysis, exchange the color difference graph and data.
- ✦ The optional Micro-printer can output the color difference data in time.



Specifications

Model	SC50	SC30
Accuracy	Standard deviation: within $\Delta E^*ab < 0.08$ (When the white calibration plates is measured 30 times, and averaged)	Standard deviation: within $\Delta E^*ab < 0.1$ (When the white calibration plates is measured 30 times, and averaged)
Illumination/Light system	45/0	
Inspection angle	10°/2°	10°
Inspection conditions	D65 / C / F11 / D50	D65
Measurement model	Single mode, Average mode	
Storage	50 groups of standard samples, 30 groups of values for each sample	12 groups of standard samples, 30 groups of values for each sample
Display	$L^*a^*b^*$, $L^*C^*H^*$, Yxy, ΔE^*ab , $\Delta(L^*a^*b^*)$, $\Delta(L^*C^*H^*)$, ΔYxy	$L^*a^*b^*$, $L^*C^*H^*$, ΔE^*ab , $\Delta(L^*a^*b^*)$, $\Delta(L^*C^*H^*)$
Language	English / Chinese	
Measurement Aperture	Ø8mm	
Power supply	4 AA-size battery or AC adapter	
Working environment	0-40°C(32-104°F), Relative humidity 85% or less	
Weight (g)	330(without batteries)	310(without batteries)
Dimension (mm)	110x60x190	

COLOR TEST
and quality management
Software



PORTABLE COLORIMETER

SC20

SC20 portable colorimeter is widely applied to quality control of plastic and printing industries. It makes you capture color efficiently and accurately. ●



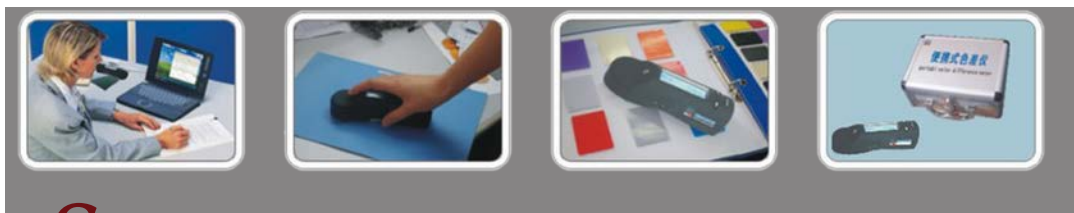
KEY FEATURES

- ✦ Easy operation makes you use it easily.
- ✦ Widely applied to quality control of plastic and printing industries.
- ✦ Display directly color difference by E^*ab , L^*a^*b , $CIE_L^*a^*b$, $CIE_L^*c^*h$.
- ✦ Standard deviation within $E^*ab0.2$ (test condition: choose average values by 12 pcs white tabula).
- ✦ It can be connected with computer to do the inspection by software with USB expansion interface.

Portable Colorimeter

Standard package

SC20 main unit	1
USB cable	1
Software CD	1
Power adapter	1
Operation manual	1
Leather pouch	1



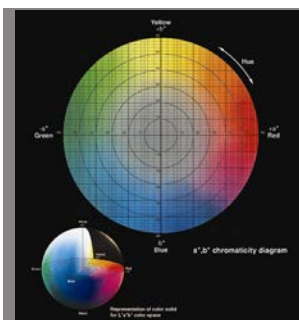
Specifications

Model	SC 20
Accuracy	<0.2 ΔE^*ab
Display	ΔE^*ab , CIE_Lab , ΔLab , CIE_Lch
Test range	L: 0~100, a: -128~127, b: -128~127
Test time	About 3 seconds
Test interval	2 seconds
Aperture (mm)	$\varnothing 8$
Power off	Automatically in 5 min
Light source	C light source
Sensor	Silicon photodiode array
Power Supply	DC/5V (1.5A)/2 x 1.5V (AAA) battery
Working environment	0~40°C, < 85%RH
Weight (g)	204
Dimension (mm)	171x50x49
Application	Measure any color of smooth surfaces

CIE COLOR SPACE CHART

Color Difference Analysis

0~0.25 ΔE	Perfect
0.25~0.5 ΔE	Acceptable
0.5~1.0 ΔE	Acceptable in some areas
1.0~2.0 ΔE	Acceptable in some areas
2.0~4.0 ΔE	Acceptable in specific applications
4.0 ΔE	Not acceptable in most applications



COLOR ANALYSIS

- connecting with computer



SURFACE ROUGHNESS TESTER

SADT ROUGHSCAN

SADT RoughScan tester is a portable, battery-powered instrument for checking surface roughness with the measured values displayed on a digital readout. The instrument can be used in the laboratory, an inspection area, in the shop, or wherever on-site surface roughness testing is required. ●



Specifications

SADT RoughScan			
Measuring Range	Ra: 0.03μm~6.3μm/1μ"~250μ" Rz: 0.2μm~50.0μm/8μ"~999μ" Ry/Rmax: 0.2μm~25μm/8μ"~999μ"	Readout Error	±10%
		Stability	≤6%
		Sensor Type	Piezoelectric
Resolution	0.01μm/1μ"	Maximum stylus force	15.0mN/1500mgf
Cut-off	0.8mm/0.30", ANSI 2RC Filter	Working Environment	10°C~45°C
Display	3-digit LCD	Storage Temperature	0°C~60°C

Traverse length	Evaluation length	Numbers of cutoff
0.5mm	0.25mm	1
1.2mm	0.8mm	
5.5mm	5.0mm	
1.25mm	0.75mm	3
3.0mm	2.4mm	
5.5mm	5.0mm	
1.75mm	1.25mm	5
4.5mm	4.0mm	
5.5mm	5.0mm	

Optional Probes

Probe	Application	
General purpose probe SFP-2001/ SFP-2002	For most surface roughness applications. SFP-2001 has a 90° conical diamond stylus, .0004"/10μm radius per ISO standards. SFP-2002 has a 90° conical diamond stylus, .0002"/5μm radius per DIN standards.	
Transverse chisel probe SFP-2003	For gaging sharp edges or small O.D.'s where probe is aligned with (in 180° or closed position) to axis of traverse. 90° diamond chisel stylus, .0004"/10μm radius.	
Parallel chisel probe SFP-2004	For gaging sharp edges or small O.D.'s where probe is perpendicular (in 90° or 270° position) to axis of traverse. 90° diamond chisel stylus, .0004"/10μm radius.	
Small bore probe SFP-2005/SFP-2006	For measuring small bores (min. inside diameter of 5.0mm, up to a depth of 15.0mm). 90° conical diamond stylus, .0004"/10μm radius for SFP-2005; 90° conical diamond stylus, .0002"/5μm radius for SFP-2006	
Groove bottom probe	For measuring the bottoms of "O" ring grooves, recesses and holes to depth of 6.0mm. Also used for short lands and shoulders. 90° conical diamond stylus, .0004"/10μm radius.	

Surface Roughness Tester

Standard package -

RoughScan

RoughScan main unit	1
Standard probe	1
Calibrate plate with the reference specimen	1
9-volt alkaline battery	1
Screw driver	1
Operation manual	1
Carrying case	1

Optional accessories

- General Purpose Probe SFP-2001
- General Purpose Probe SFP-2002
- Transverse Chisel Probe SFP-2003
- Parallel Chisel Probe SFP-2004
- Small Bore Probe SFP-2005
- Small Bore Probe SFP-2006
- Groove bottom probe SFP-2007
- Height Stand
- Standard test block



SURFACE ROUGHNESS TESTER SADT SR200



Standard package - SR200

SR200 main unit	1
Standard probe	1
Calibrate specimen	1
Specimen plate	1
Power adaptor	1
Screw driver	1
Operation manual	1
Carrying case	1

Optional accessories

General Purpose Probe
Curved surface Probe
Small Bore Probe
Groove bottom probe
Height Stand
Calibrate specimen
Measurement platform
Extension rod
Micro printer

SR200 surfaces roughness measure instrument is suitable for shop floor use and mobile measure to need of a small handheld instrument, it operation simple, function overall, measure fast, accuracy stability, take convenience. The SR200 is capable of evaluating surface textures with a variety of parameters according to various national standards and international standard. The measurement results are displayed digital/graphically on the LCD, and output to the printer. ●

KEY FEATURES

- + 15 parameters: Ra, Rq, Rz, Rt, Rp, Rv, RS, RSm, Rz(JIS), Ry(JIS), RSk, R3z, Rmax, Rpc, Rmr;
- + High accuracy inductance probe;
- + Four filtering methods of RC, PC-RC, GAUSS and D-P;
- + Compatible with four standards of ISO, DIN, ANSI and JIS;
- + Can store 15 sets of measurements results
- + 128×64 dot matrix LCD displays all parameters and graphs;
- + DSP chip is used to control and process data with high speed and low power consumption;
- + Built-in lithium ion chargeable battery and control circuit have high capacity, without memory effect. Consecutive work time is longer than 20 hours;
- + Design of mechanical and electrical integration is adopted to achieve small bulk, light weight and easy usage;
- + Can be connected to printer to print all parameters and graphs;
- + Built-in standard RS232 interface enables communication with PC;
- + Automatic switch off, memory and various prompt instructions;
- + Optional printer, analysis software and measurement platform.

Specifications

SADT SR200		
Measuring range	Z Axis (Vertical)	160µm
	X Axis (Horizontal)	17.5mm
Resolution	Z Axis (Vertical)	0.01µm/±20µm 0.02µm/±40µm 0.04µm/±80µm
	Parameters	Ra, Rq, Rz, Rt, Rp, Rv, RS, RSm, Rz(JIS), Ry(JIS), RSk, R3z, Rmax, Rpc, Rmr;
	Standards	ISO, ANSI, DIN, JIS
Measurement item	Graphic	Roughness profile, Material ratio curve, Direct profile
	Filter	RC, PC-RC, Gauss, D-P
Sampling length (lr)		0.25, 0.8, 2.5mm
Assessment length (ln)		Ln= lr×n n=1~5
Probe	principle	Differential inductance
	Stylus	Natural Diamond, 90° cone angle, 5µm tip radius
	Force	<4mN
	Skid	Ruby, Longitudinal radius 40mm
	Traversing speed	lr=0.25, Vt=0.135mm/s lr=0.8, Vt=0.5mm/s lr=2.5, Vt=1mm/s Return Vt=1mm/s
Accuracy		Less than or equal to ±10%
Repeatability		Less than or equal to 6%
Power supply		Built-in Lithium ion battery, AC adapter 8.4V, 800mA
Dimension		119×47×65mm (L×W×H)
Weight		approximately 380g

METALLURGICAL MICROSCOPE SM500



SM500 is a self-contained portable metallurgical microscope ideally used for inspecting metallography of metals in laboratory or in situ. With fully handheld design and unique magnetic stand, SM500 can be attracted directly against the surface of ferrous metal at any angles for non-destructive examination on flatness, curvature as well as other complicated surface.

SM500 can also be used with digital camera or CCD image process system to download metallurgical image to PC for data transfer, analysis, storage and printout. ●

KEY FEATURES

- ✦ Portable metallurgical laboratory, with on-site sample preparation, microscope, camera. Without AC power supply in field
- ✦ Natural colors without changing light by dimming the LED lighting provides the best image observed at any time.
- ✦ Magnetic stand can be attracted against metals at any angles.

Specifications

Microscope main	100-500x (extendable 1500x)	Power supply	230V AC 50/60Hz
Eyepiece(large view)	10x, 12.5x	Stand	On-off magnetic stand
Objective	10x, 40x	Dimension(mm)	210x160x95
Slideway	X-direction 15mm Y-direction 12mm	Net weight (kg)	2.5
Illuminator	LED		

Optional accessories



E-P302 Electrolytic Polisher

- * Non-destructive polisher of large workpiece size
- * Constant voltage constant flow
- * Electrolyte does not leak, easy to clean-up
- * Digital show voltage and current values and with a timing device
- * Recommended for the in situ, non-destructive examination or in laboratory.
- * It can also be used for large samples.



SM500 with adaptor for digital camera



SM500 with CCD adaptor to PC



MP395 Mini Grinder with 2 sets of wheel heads

Metallurgical Microscope

Standard package - SM500

SM500 main body 100-500x	1
Eyepiece: 10x	1
Eyepiece: 12.5x	1
Objective: 10x	1
Objective: 40x	1
Slideway: x-direction 15mm, y-direction 12mm	1
On-off magnetic stand	1
LED Illuminator	1
Power adaptor	1
Operation manual	1
Carrying case	1

Optional accessories

Additional stand for small samples	
Digital camera	
Adapter for digital camera with eyepiece	
CCD with interface	
Eyepiece 5x/10x/15x/16x	
Objective 4x/5x/10x/20x/40x/50x/80x/100x	
Mini grinder	
Electrolytic polisher	
A set of wheel heads	
Polishing cloth wheel	
Replica film	
Filter (green, blue, yellow)	

PORTABLE METALLURGRAPHIC MICROSCOPE SM-3



Standard package - SM-3

SM-3 main body	1
Eyepiece: 10x	1
Eyepiece: 20x	1
Objective: 5x	1
Objective: 10x	1
Objective: 50x	1
LED illuminator	1
Power adaptor	1
Magnetic stand	1
Filter(green, sunlight)	1
Adaptor for digital camera 10x 1	
C-Mount 0.5x video adaptor	1
Operation manual	1
Carrying case	1

KEY FEATURES

- + Special magnetic base, fixing the unit firmly on the workpieces
- + Suitable for large-scale roll test and direct observation, no cutting and sampling
- + LED lighting, uniform color temperature, no heating
- + Forward/backward and left/right moving mechanism for main machine, convenient for adjustment of the inspection point
- + Point connecting of digital cameras, observing the records directly on PC

Specifications

Observation method	Upright	Illuminator(halide)	Build-in LED or 6V15W light source
Microscope main	50x-1000x	Power supply	230V AC 50/60Hz
Eyepiece(large view)	10x, 20x	Stand	On-off magnetic stand
Objective	5x, 10x, 50x	Dimension(mm)	550x260x380
Adaptor	digital camera adaptor with 10x eyepiece video adaptor C-mount 0.5x	Net weight (kg)	2.7

Standard package - XD200

XD200 main body	1
Eyepiece: 10x	1
Objective: 10x	1
Bulb (halide)	1
Operation manual	1
Carrying bag	1

CAST IRON HANDHELD MICROSCOPE XD200



KEY FEATURES

- + Only 2kg, with batteries, it's convenient to carry out.
- + Long distance to observe, designed specially for casting industry.
- + Magnification 100X, which can be expanded to 400X.
- + Design of relected light and LED illuminator makes the pictures clearer.
- + Rapid nodularity test
- + Copper optical frame, long service life.

Specifications

Microscope main	100x, 400x(optional)	Power supply	D size battery *2
Eyepiece	10x	Dimension(mm)	430*590*500
Objective	10x/0.25	Net weight (kg)	2.0
Illuminator	reflect light, LED light source		

Standard package - XD601

XD601 main body	1
Eyepiece: 10x	1
Eyepiece: 12.5x	1
Objective: 10x	1
Objective: 25x	1
Objective: 40x	1
LED illuminator	1
Magnetic stand	1
Operation manual	1
Carrying case	1

SUPER-COMPACT PORTABLE MICROSCOPE XD601



KEY FEATURES

- + Micro-analysis of collapsed section surfaces of metal materials
- + Observation of metal structure
- + Inspection of surfaces of metal and solid objects on the site
- + Inspection of coating layer and film surface
- + Inspection of edge of tools

INVERTED METALLOGRAPHIC MICROSCOPE SM400



KEY FEATURES

- + Economical practical design offering for inspecting grain coarsening metallurgical samples.
- + Easy installation by the production line and easy to carry.
- + The SM400 is suitable for colleges and factory .



An adapter for attaching an digital camera to the trinocular tube is also available. This mode needs MI of the metallographic image printing with fixed sizes. ●



We have a selection of CCD adapters for computer print-out with standard magnification and more than 60% observation view... ●

Specifications

Observation method	Inverted, bright field, polarizing	Objective	10 ^x / 0.25 20 ^x / 0.4 40 ^x / 0.65 100 ^x / 1.25 (oil, optional)
Magnification	100 ^x , 200 ^x , 400 ^x , 1000 ^x (optional)	Field diaphragm	1
Focus	Graduation: 1μm	Mirror	1
Illuminator	6V, 30W	Power supply	220V / 110V
Stage	180x150mm	Dimension(mm)	560x195x300
Eyepiece	10 ^x (F.N18) x 2	Net weight (kg)	12
Nosepiece	4		

INVERTED METALLOGRAPHIC MICROSCOPE SD100M

Digital Imaging

Adopt special multi-coated eyepiece, high image quality, comfortably viewing 50% eyepiece - 50% video output, that both show a clear image. Digital images can be acquired at the same time of observation ●



LED Light Illumination

SD-100M equipped with high-power LED Lighting, used time of light is more than 10,000 hours. Light is uniform that does not produce center spot ●



Metallurgical Objectives

International standard professional chromatic objective that significantly eliminate spherical aberration. Whole the field of vision is clear at a high multiple observation ●

Specifications

Optical	SADT infinity system	Nosepiece	5
Observation method	Inverted, bright field	Objective	5 ^x , 10 ^x , 20 ^x , 50 ^x , 100 ^x (Optional)
Magnification	50 ^x , 100 ^x , 200 ^x , 500 ^x , 1000 ^x (Optional)	Filter	Green Filter
Focusing Mechanism	Low position coaxial focus system, coarse: 38mm per rotation, fine precision 0.002mm	Digital Imaging System	3 million pixels CMOS, 1/2 target surface, Resolution 2048*1546 (Optional)
Illuminator	Transmission Koehler illumination with alterable aperture diaphragm and centerable field diaphragm, with continuous intensity	Power supply	90-240V
Stage	Moving rang: 75mm X 40mm, precision: 0.1mm	Dimension(mm)	570X310X260mm
Eyepiece	10 ^x , reticle eyepiece 10 ^x	Net weight (kg)	5

Metallurgical Microscope

Standard package - SM400

SM400 main body	1
Trinocular head	1
Mechanical stage	1
Illuminator(halide): 6V 30W	1
Power supply: 220V	1
High resolution plan achromat objective:	
10 ^x /20 ^x /40 ^x	1 for each
Eyepiece: 10 ^x	2
Operation manual	1

Optional accessories

Eyepiece: 12.5 ^x	
Reticle eyepiece 10 ^x	
Objective: 100 ^x (Oil)	
3M pixel CCD with adaptor	

Standard package - SD100M

SD100M main body	1
Trinocular head	1
3 Plate Mechanical stage	1
Lamp house	1
High resolution plan achromat objective:	
5 ^x /10 ^x /20 ^x /50 ^x	1 for each
Eyepiece: 10 ^x	1
Recticle Eyepiece: 10 ^x	1
Filter	1
Operation manual	1

Optional accessories

Objective: 100 ^x (Dry)	
3M pixel CCD with adaptor	
Adapter for digital camera	
Polarizer	

Standard package - SD300M

SD300M main body	1
Trinocular head	1
Mechanical stage	1
Stage plate	1
Lamp house	1
Bulb: 12V, 50W	4
High resolution plan achromat objective: 5 ^x /10 ^x /20 ^x /50 ^x /100 ^x	1 for each
Eye-piece: 10 ^x	2
Filter	1
Polarizer	1
Operation manual	1

Optional accessories

C-Mount	
3M pixel CCD with adaptor	

Standard package - HB SCALER

Measuring head	1
Measuring software	1
USB security dog	1
USB cable to PC	1
Standard indentation test block	1
Operation manual	1
Carrying case	1

INVERTED METALLOGRAPHIC MICROSCOPE SD300M

KEY FEATURES

- + Infinite focusing optics provides high resolution image.
- + Objective: Long viewing distance type.
- + Wide field of view: 20mm
- + The three-plate mechanical stage can accept nearly all sample sizes and also allows nondestructive microscope examination of large components.



SADT optics provides high NA and long viewing distance. SADT optics delivers bright, high-resolution images. New optical coating improve dustproof and dampproof in SD300M.



The large stage surface enables observation of heavy samples. The three-plate structure gives the microscope stable and superior durability.

Specifications

<i>Optical</i>	SADT infinity system	<i>Nosepiece</i>	5
<i>Observation method</i>	Inverted, bright field, polarizing	<i>Objective</i>	5 ^x /0.13, WD11.5; 10 ^x /0.3, WD6.8 20 ^x /0.4, WD11.1; 50 ^x 0.55, WD8.2 100 ^x /0.8, WD2.0(spring)
<i>Magnification</i>	50 ^x ,100 ^x ,200 ^x ,500 ^x , 1000 ^x	<i>Field diaphragm</i>	1
<i>Focus</i>	Graduation:1µm	<i>Mirror</i>	1
<i>Illuminator</i>	12V, 50W	<i>Power supply</i>	90-240V
<i>Stage</i>	247x270mm	<i>Dimension(mm)</i>	700x320x400
<i>Eye-piece</i>	10 ^x (F.N20)	<i>Net weight (kg)</i>	15

BRINELL HARDNESS READING MEASURING SYSTEM SADT HB SCALER

HB Scaler is an optical measuring system which can measure the size of indentation from Brinell hardness tester and gives the Brinell hardness readings. All values and indentation images can be saved in PC. With the software, all values can be processed and printout as a report.

KEY FEATURES

- + High accuracy: ±0.01mm
- + Read out in HBW and mm
- + All HB readings and images can be saved
- + Print out test report
- + Quick respond: <0.001s



Specifications

Measuring scale: HBW10/3000, HBW10/1000, HBW5/750/, HBW5/250, HBW2.5/187.5

Measuring range: indent: 0.6~6mm

Hardness: 31~650HBW

Resolution: 0.1HBW

Respond interval: <0.001s

Power: From USB port

Weight: 100g (Measuring head)

Dimension: 95xØ35mm

ROCKWELL HARDNESS TESTER

Bench Hardness Tester

HR-150A Rockwell Hardness Tester



The manually operated HR-150A Rockwell hardness tester is highly appreciated for its perfection and very easy operation. This machine uses the standard preliminary test force of 10kgf and main loads of 60/100/150 kilograms conform the international Rockwell standard. After each test the HR-150A shows the Rockwell B or Rockwell C hardness value directly on the dial indicator. The preliminary test force has to be applied manually, followed by applying the main load by means of the lever at the right side of the hardness tester. After unloading the dial indicates the requested hardness value directly with high accuracy and repeatability. ●

HR-150DT Motorized Rockwell Hardness Tester



HR-150DT Motorized Rockwell Hardness Tester features high measuring accuracy, reliable performance and applicable to wide fields. By adopting the motor driven automatic loading and unloading technique, that thoroughly eliminates human error in those operations. HR-150DT serves to measure the hardness of hard metals, carburized steels, quenched steel, hardcast iron, mild steels, Al-alloys, Cu-alloys and malleable irons. ●

HRS-150 Digital Rockwell Hardness Tester



The HRS-150 digital Rockwell hardness tester is designed for ease of use and safety in operation, and conforms with the international Rockwell standard. It is an organic whole of mechanical and electrical hardness testing instrument, with its novel appearance, directly observed digital display device and micro computer control lifting and lowering screwed and automatic feedback lock among rotary wheels, connecting outside to the printer, full realizes the automatic. That completely eliminates error in those operations and reading. It can used to measure the Rockwell hardness of ferrous, nonferrous metals and plastic materials. ●

Specifications & Packing List

Model	HRS-150	HR-150DT	HR-150A
Type	Digital Rockwell hardness tester	Motorized Rockwell hardness tester	Rockwell hardness tester
Preliminary test force (N/kgf)	98.07/10		
Rockwell hardness test (N/kgf)	588/60, 980/100, 1471/150		
Test force dwell time (s)	0~30		-
Hardness indication	Digital	Dial	
Max. height of specimens (mm)	170		
Max. depth of specimens (mm)	160	135	
Power	AC220V, 50/60Hz		-
Dimension (DxWxH) (mm)	510 x 212 x 700		466 x 238 x 630
Net weight (kg)	85		65
Standard package			
Main machine	1	1	1
Diamond Rockwell indenter	1	1	1
Ø1.5875mm hardmetal ball indenter	1	1	1
Testing table (big, medium, V)	1 for each type	1 for each type	1 for each type
Standard Rockwell hardness block	3	3	3
Weight	3	3	3
Fuse	2		
Power cord	1	1	-
Operation manual	1	1	1
Internal printer	1	-	-
Printer manual	1	-	-
Print paper	1	-	-
RS-232 cable	1	-	-

HRM-45DT Motorized Superficial Rockwell Hardness Tester



This series of hardness testers features high measuring accuracy, reliable performance and applicable to wide fields. By adopting the motor driven automatic loading and unloading technique, that thoroughly eliminates human error in those operations. Model HRM-45DT serves to determine the superficial Rockwell Hardness of hardmetals, carburized, nitrided layers, and other chemical treating layers, it is also used to for hardness test of thinner pieces. ●

HRMS-45 Superficial Rockwell Hardness Tester



HRMS-45 Digital Superficial Rockwell Hardness Tester adopts novel-designed large LCD screen to display, as well as menu structure. Its main functions are as follows: 1. Selection of Rockwell hardness scales, 2. Exchange hardness values among hardness scales, 3. Output the results of hardness measurement with printer, 4. RS-232 hyper terminal setting is with good reliability, excellent operation and easy watching. Usage Range: surface hardened steel, surface heat treating and chemical treating materials, copper, aluminum alloy sheet, zinc layers, chrome layers, tin layers, bearing steel, cold and hard casting parts, etc. ●

XHR-150 Plastic Rockwell Hardness Tester



XHR-150 plastics Rockwell hardness tester adopts motorized testing method, its testing force can be loaded, kept and unloaded automatically. Avoid man-made error and easy to use. It is therefore, welcomed by many users. It serves to measure hard plastics, hard rubbers, aluminum, tin, copper, soft steel, synthetic resins, fricative materials, etc. ●

Specifications & Packing List

Model	HRM-45DT	HRMS-45	XHR-150
Type	Motorized superficial Rockwell hardness tester	Digital superficial Rockwell hardness tester	Plastics Rockwell hardness tester
Preliminary test force (N/kgf)	29.4/3		98.07/10
Rockwell hardness test (N/kgf)	-	-	588.4/60, 980.7/100, 1471/150
Superficial Rockwell hardness test (N/kgf)	147/15, 294/30, 441/45		-
Measuring range	70-91 HR15N / 42-80 HR30N / 20-70 HR45N 73-93 HR15T / 43-82 HR30T / 12-72 HR45T		70-94 HRE / 100-120 HRL 85-110 HRM / 114-125HRR
Test force dwell time (s)	2~60		
Hardness indication	Dial	Digital	Dial
Max. height of specimens (mm)	170		
Max. depth of specimens (mm)	165		
Power	AC220V, 50/60Hz		
Dimension (DxWxH) (mm)	520 x 215 x 700	500 x 150 x 750	520 x 215 x 700
Net weight (kg)	80		78
Standard package	HRM-45DT	HRMS-45	XHR-150
Main machine	1	1	1
Diamond Rockwell indenter	1	1	-
Ø1.5875mm hard metal ball indenter	1	1	-
Steel ball indenter (Ø3.175mm, Ø6.35mm, Ø12.70mm)	-	-	1 for each type
Testing table (big, medium, V)	1 for each type	1 for each type	1 for each type
Standard superficial Rockwell hardness block	3	3	-
Standard plastic Rockwell hardness block	-	-	4
Lever	1	-	1
Weight	3	3	-
Power cord	1	1	1
Operation manual	1	1	1
Internal printer	-	1	-
Printer operation manual	-	1	-
Print paper	-	1	-
RS-232 cable	-	1	-

VICKERS HARDNESS TESTER

Bench Hardness Tester

HV-5/10/30/50 Digital Vickers Hardness Tester



The Vickers Hardness Tester is a new and high-tech product combining the optical, mechanical and electronic techniques, with a good aesthetic aspect, operational functions and reliability, and hence it is an ideal instrument for the testing of Vickers hardness. The instrument adopts closed-loop loading control system, it makes the test accuracy improved and the repeatability and stability of the value better.

With the soft keys on panel board for input operation:

Arbitrarily choose the test force.

Preset the testing force dwell time.

Adjust intensity of light source.

Read the indentation length and after input it shows the hardness value and the number of measurements.

The instrument is suitable for the testing Vickers hardness value of the micro and thin pieces, permeated and coated plane surface, the crisp materials such as the agate, glass and it is, therefore, an ideal hardness measuring instrument for the scientific research institutes, the universities, the industrial production units and the metrological institutes.

According to the particular requirements of the client, the tester can be equipped with CCD indentation automatically measuring device. (optional)

Specifications & Packing List

Model	HV-5	HV-10	HV-30	HV-50
Type	Vickers low load hardness tester	Vickers low load hardness tester	Vickers hardness tester	Vickers hardness tester
Testing Forces (N)	2.942 / 4.903 / 9.807 / 19.61 / 24.52 / 29.42 / 49.03	2.942 / 4.903 / 9.807 / 19.61 / 24.52 / 29.42 / 49.03 / 98.07	4.903 / 9.807 / 19.61 / 24.52 / 29.42 / 49.03 / 98.07 / 196.1 / 294.2	9.807 / 19.61 / 24.52 / 29.42 / 49.03 / 98.07 / 196.1 / 294.2 / 490.3
Testing Forces (Kgf)	0.3 / 0.5 / 1 / 2 / 2.5 / 3 / 5	0.3 / 0.5 / 1 / 2 / 2.5 / 3 / 5 / 10	0.5 / 1 / 2 / 2.5 / 3 / 5 / 10 / 20 / 30	1 / 2 / 2.5 / 3 / 5 / 10 / 20 / 30 / 50
Load control	Automatic loading, dwelling and releasing			
Holding Time (s)	0~60 (5s as a unit)			
Magnification of microscope ^X	400 ^X for measurement, objective 40 ^X , eyepiece 10 ^X 200 ^X for observation, objective 20 ^X , eyepiece 10 ^X	200 ^X for measurement, objective 20 ^X , eyepiece 10 ^X 100 ^X for observation, objective 10 ^X , eyepiece 10 ^X	100 ^X for measurement, objective 10 ^X , eyepiece 10 ^X 200 ^X for observation, objective 20 ^X , eyepiece 10 ^X	
Resolution (μm)	0.25 μm for 400 ^X / 0.50 μm for 200 ^X / 1.00 μm for 100 ^X			
Testing range	1 HV~2967 HV			
Max. Height of the specimen	170mm			
Max. width of the specimen	130mm			
Power	100/220V, AV 50/60Hz			
Dimension LxWxH (mm)	530 x 280 x 630			
Weight (kg)	47			
Standard package	HV-5	HV-10	HV-30	HV50
Main machine	1	1	1	1
Vickers indenter (equipped with main machine)	1	1	1	1
Objective (equipped with main machine)	Measuring objective 40 ^X x 1 observing objective 20 ^X x 1	Measuring objective 20 ^X x 1 observing objective 10 ^X x 1	Measuring objective 10 ^X x 1 observing objective 20 ^X x 1	Measuring objective 10 ^X x 1 observing objective 20 ^X x 1
Eyepiece	10 ^X x 1	10 ^X x 1	10 ^X x 1	10 ^X x 1
Test table	Crossing testing table	Crossing testing table	Large testing table x 1, V-Shaped testing table x 1	Large testing table x 1, V-Shaped testing table x 1
Test block	Vickers block x 2	Vickers block x 2	Vickers block x 2	Vickers block x 2
Level regulation screw	4	4	4	4
Level	1	1	1	1
Screwdriver	1	1	1	1
Internal hexangular spanner 2.5mm	1	1	1	1
Spare fuse	2	2	2	2
Spare bulb	1	1	1	1
Product operating manual	1	1	1	1

DIGITAL VICKERS HARDNESS TESTER

Bench Hardness Tester

HVS-5/10/30/50 Digital Vickers Hardness Tester



The Vickers Hardness Tester is a new and high-tech product combining the optical, mechanical and electronic techniques, with a good aesthetic aspect, operational functions and reliability, and hence it is an ideal instrument for the testing of Vickers hardness. Made with a precise structure design in mechanical field, the instrument adopts motorized testing force loading system to instead of traditional and heavy weights, therefore the force application more stable, the force value more precise and operation more easy. By means of 0.5% accuracy compression sensor to feedback the information of force application, and automatically compensate the test force lost by itself, the instrument can dynamically show the instantaneous value of force applied on LCD screen of panel board. We use CPU to control all testing process in electric field, adopts new technology of highly clear optic testing system and photoelectric sensor in optic field. With the soft keys on panel board for input operation, the tester has multiple functions as preset the value of testing force and duration time firstly, adjust intensity of light source, and all the testing data such as indentation length, the hardness value, the dwell time of load, and the number of measurements are all shown on the LCD screen. According to the particular requirements of the client, the tester can be equipped with CCD indentation automatically measuring device or video measuring device. The instrument is suitable for the testing Vickers hardness value of the micro and thin pieces, the parts with the strengthening layer, heat treating and permeated and coated plane surface, the crisp materials such as the agate, glass, ceramics and it is, therefore, an ideal hardness measuring instrument for the scientific research institutes, the universities, the industrial production units and the metrological institutes. ●

Specifications & Packing List

Model	HVS-5	HVS-10	HVS-30	HVS-50
Type	Digital Vickers low load hardness tester	Digital Vickers low load hardness tester	Digital Vickers hardness tester	Digital Vickers hardness tester
Testing Forces (N)	2.942 / 4.903 / 9.807 / 19.61 / 24.52 / 29.42 / 49.03	2.942 / 4.903 / 9.807 / 19.61 / 24.52 / 29.42 / 49.03 / 98.07	4.903 / 9.807 / 19.61 / 24.52 / 29.42 / 49.03 / 98.07 / 196.1 / 294.2	9.807 / 19.61 / 24.52 / 29.42 / 49.03 / 98.07 / 196.1 / 294.2 / 490.3
Testing Forces (Kgf)	0.3 / 0.5 / 1 / 2 / 2.5 / 3 / 5	0.3 / 0.5 / 1 / 2 / 2.5 / 3 / 5 / 10	0.5 / 1 / 2 / 2.5 / 3 / 5 / 10 / 20 / 30	1 / 2 / 2.5 / 3 / 5 / 10 / 20 / 30 / 50
Load control	Automatic loading, dwelling and releasing			
Holding Time (s)	0~60 (5s as a unit)			
Magnification of microscope ^X	400 ^X for measurement, objective 40 ^X , eyepiece 10 ^X 200 ^X for observation, objective 20 ^X , eyepiece 10 ^X	400 ^X for measurement, objective 40 ^X , eyepiece 10 ^X 100 ^X for observation, objective 10 ^X , eyepiece 10 ^X	100 ^X for measurement, objective 10 ^X , eyepiece 10 ^X 200 ^X for observation, objective 20 ^X , eyepiece 10 ^X	
Resolution (μm)	0.0625 μm for 400 ^X / 0.125 μm for 200 ^X / 0.25 μm for 100 ^X			
Testing range	1 HV~2967 HV			
Max. Height of the specimen	170mm			
Max. width of the specimen	130mm			
Power	100/220V, AV 50/60Hz			
Dimension LxWxH (mm)	530 x 280 x 630			
Weight (kg)	47			
Standard package	HVS-5	HVS-10	HVS-30	HVS-50
Main machine	1	1	1	1
Vickers indenter (equipped with main machine)	1	1	1	1
Objective (equipped with main machine)	Measuring objective 40 ^X x 1 observing objective 20 ^X x 1	Measuring objective 40 ^X x 1 observing objective 10 ^X x 1	Measuring objective 10 ^X x 1 observing objective 20 ^X x 1	Measuring objective 10 ^X x 1 observing objective 20 ^X x 1
Eyepiece	10 ^X x 1	10 ^X x 1	10 ^X x 1	10 ^X x 1
Test table	Crossing testing table	Crossing testing table	Large testing table x 1, V-Shaped testing table x 1	Large testing table x 1, V-Shaped testing table x 1
Test block	Vickers block x 2	Vickers block x 2	Vickers block x 2	Vickers block x 2
Level regulation screw	4	4	4	4
Level	1	1	1	1
Screwdriver	1	1	1	1
Internal hexangular spanner 2.5mm	1	1	1	1
Spare fuse	2	2	2	2
Spare bulb	1	1	1	1
Product operating manual	1	1	1	1

HV-1000 Micro Hardness Tester
HVS-1000 Digital Micro Hardness Tester



HV-1000/HVS-1000 Micro Vickers Hardness Tester made with a unique and precision design in the field of mechanics, optics and light source, is able to produce a clearer image of indentation and hence a more precise measurement. By means of a 10x objective and a 40x objective for measurement, the tester has a wider measurement field and a broader usage range. It shows measuring method, the testing force value, the indentation length, hardness value, the dwell time of the testing force, as well as the number of measure-

ment on its LCD screen. Beside, it has such functions as registering year, month and date, measuring result, treating data, outputting information with its built-in printer. The tester has a threaded interface that can be linked to the digital camera and CCD pickup camera, and a RS232 interface as well. The light source of the tester is firstly and uniquely adopted cold light source, and hence its life can reach 100000 hours. The user also can select halogen lamp as light source according to their requirement. The CCD Automatically Image Measuring Device can be equipped on present tester according to user's requirement. The LCD Video Measuring Device can be equipped on the present tester according to user's requirement. According to user's requirement, the tester also can measure Knoop hardness value after equipping a Knoop indenter.

DHV-1000 Micro Hardness Tester
DHV-1000Z Digital Vickers Hardness Tester



DHV-1000

DHV-1000 / DHV-1000Z micro Vickers hardness tester made with a unique and precise design in the field of mechanics, optics and light source is able to produce a clearer indentation and hence a more precise measurement. By means of a 20 × lens and a 40 × lens the tester has a wider measurement field and a broader usage range. Equipped with a digital microscope, it shows the measuring methods, the test force, the indentation length, the hardness value, the dwell time of the test force as well as the number of the measurements -- all shown on its LCD screen. What is more, it is equipped with an interface linked to a digital camera and a CCD video camera. This tester is widely used for measuring: Ferrous metals, non-ferrous metals, IC thin sections, coatings, ply-metals; Glass, ceramics, agate, precious stones; Hardness such as that on the depth and the trapezium of the carbonized layers and quench hardened layers.

XHV-1000 Digital Micro Hardness Tester



XHV-1000

DXHV-1000 Digital Micro Vickers Hardness Tester made with a unique and precise design in the fields of mechanics, optics and light source is able to produce a clearer indentation and hence a more precise measurement. By means of a 20 × lens and a 40 × lens the tester has a wider measurement field and a broader usage range. With an automatically turning device (the automatically turning turret), the operation has become easier; and with a thread interface, it can be linked to a digital camera and a CCD Video-camera. It is the first tester that has adopted the LCD touch screen, thus making the operation more humanized. The tester has such features as the direct reading of the measurements, the easy change of the hardness scales, the reservation of the data, the printing and the linkage with RS232 interface. This tester is widely used for measuring: Ferrous metals, non-ferrous metals, IC thin sections, coatings, ply-metals; Glass, ceramics, agate, precious stones; thin plastic sections; etc. Hardness such as that on the depth and the trapezium of the carbonized layers and quench hardened layers.

Specifications & accessories

Model	HV1000	HVS1000	DHV-1000	DHV-1000Z	XHV-1000
Type	Micro hardness tester	Digital micro hardness tester	Digital micro hardness tester	Digital micro hardness tester	Digital micro hardness tester
Testing Forces (N)	0.098 / 0.246 / 0.49 / 0.98 / 1.96 / 2.94 / 4.90 / 9.80				
Testing Forces (gf)	10 / 25 / 50 / 100 / 200 / 300 / 500 / 1000				
Load control	Automatic loading and releasing				
Objective-indenter turret	Manual			Automatic	
Holding Time (s)	5~60				
Magnification of microscope ^x	400 ^x for measurement, objective 40 ^x eyepiece 10 ^x 100 ^x for observation, objective 10 ^x eyepiece 10 ^x				
Micrometer resolution (μm)	0.25				0.0625
Testing range	1 HV~2967 HV				
Dimension of XY test table	100X100 mm				
Movement range of XY test table	25X25 mm				
Max. Height of the specimen	100mm		70mm		
Max. width of the specimen	98mm		95mm		
Hardness conversion	-	Provided			
Output	-	Built-in printer, RS232 interface		-	Built-in printer, RS232 interface
Power	110/220V, 60/50Hz				
Dimension (mm)	480 x 305 x 545			425 x 245 x 490	
Net weight (kg)	30			35	
Main accessories	HV1000	HVS1000	DHV-1000	DHV-1000Z	XHV-1000
Main machine	1	1	1	1	1
Micro Vickers test block	2	2	2	2	2
Micrometer eyepiece	10 ^x x 1	10 ^x x 1	10 ^x x 1	10 ^x x 1	10 ^x x 1
Test table	X-Y stage / fine wire / fork-shaped / thin specimen, 1 for each type	X-Y stage / fine wire / fork-shaped / thin specimen, 1 for each type	X-Y stage / fine wire / fork-shaped / thin specimen, 1 for each type	X-Y stage / fine wire / fork-shaped / thin specimen, 1 for each type	X-Y stage / fine wire / fork-shaped / thin specimen, 1 for each type
Objective	10 ^x x 1, 40 ^x x 1	10 ^x x 1, 40 ^x x 1	10 ^x x 1, 40 ^x x 1	10 ^x x 1, 40 ^x x 1	10 ^x x 1, 40 ^x x 1
Indenter	Micro Vickers indenter x 1	Micro Vickers indenter x 1	Micro Vickers indenter x 1	Micro Vickers indenter x 1	Micro Vickers indenter x 1
Level	1	1	1	1	1
Product operating manual	1	1	1	1	1

BRINELL HARDNESS TESTER

MULTI-PURPOSE HARDNESS TESTER

Bench Hardness Tester



HD₉₋₄₅ Superficial Rockwell & Vickers Optical Hardness Tester

HD₉₋₄₅ Superficial Rockwell & Vickers optical hardness tester serves the purpose of measuring the hardness of ferrous, non-ferrous metals, hard metals, carburized or nitrided layers and chemical treating layers. It is also used for the hardness test of thin pieces.



HBRVU-187.5 Brinell Rockwell & Vickers Optical Hardness Tester

This tester is used for determining the Brinell, Rockwell and Vickers hardness of ferrous, non-ferrous metals, hardmetals, carburized layers and chemical treating layers. It can be applied in the factories, scientific research institutes, laboratories and colleges.



HBRV-187.5 Brinell Rockwell & Vickers Hardness Tester

This tester is used for determining the Brinell, Rockwell and Vickers hardness of ferrous, non-ferrous metals, hardmetals, carburized layers and chemical treating layers. It can be applied in the factories, scientific research institutes, laboratories and colleges. It's not an optical type hardness tester.

HBE-3000A Brinell Hardness Tester

HBE-3000A automatic Brinell hardness tester features a wide measuring range up to 3000 Kgf with a high accuracy conform DIN 51225/1. During the automatic test cycle the applied force will be controlled by closed loop system which guarantees a constant force on the work piece, conforming to DIN 50351. The HBE-3000A comes completely with a reading microscope with enlargement factor 20^x and a micrometer resolution of 0.005mm.



MHB-3000 Digital Electronic Brinell Hardness Tester

MHB-3000 digital Brinell hardness tester is a unified product combining optical, mechanic and electronic techniques, which is adopted the precise mechanical structure and computer control closed-circuit system. Without the weights, the instrument loads and unloads the testing force with the motor. By means of the 0.5% accuracy compression sensor to feedback the information and the CPU to control, the instrument compensates automatically the testing force lost during the testing. Equipped with a digital micro eyepiece on the instrument, the length of indentation can be measured by this eyepiece directly. All testing data such as the testing method, the testing force value, the length of testing indentation, the hardness value and the dwell time of testing force can be showed on the LCD screen, without inputting the value of diagonal length for the indentation and free from looking up the hardness value from the hardness table as well, therefore the reading data are more accuracy and operation of this instrument is more easy.



Specifications & accessories

Model	HBE-3000A	MHB-3000	HBRVU-187.5	HBRV-187.5	HD ₉₋₄₅
Type	Brinell hardness tester	Digital Brinell hardness tester	Brinell, Rockwell & Vickers optical hardness tester	Brinell, Rockwell & Vickers hardness tester	Superficial Rockwell & Vickers
Test range	8~650 HBW (hardmetals steel ball)		-	-	-
Preliminary test force (N)	-	-	98		29.4
Rockwell hardness test (N)	-	-	588, 980, 1471		-
Superficial Rockwell hardness test (N)	-	-	-	-	147.1, 294.2, 441.3
Brinell test force test (N)	612, 980, 1225, 1837.5, 2450, 4900, 7350, 9800, 14700, 29400		306, 613, 1839		-
Brinell test force test (kgf)	62.5, 100, 125, 187.5, 250, 500, 750, 1000, 1500, 3000		31.25, 62.5, 187.5		-
Vickers hardness test (N)	-	-	294, 980		49, 98, 196, 294.2
Load control	-	-	-	-	-
Magnification of microscope ^X	20 ^X for reading microscope	15 ^X for reading microscope	37.5 ^X , 75 ^X		75 ^X , 150 ^X
Micrometer resolution (mm)	0.005	0.0025	-	-	-
Max. height of specimens (mm)	220	225	160 for Rockwell, 100 for Vickers, Brinell	170 for Rockwell, 140 for Vickers, Brinell	200 for superficial Rockwell, 100 for Vickers
Max. depth of specimens (mm)	135	135	200	165	200
Power	AC220V, 50/60Hz		AC220V, 50/60Hz		
Dimension (DxWxH) (mm)	550 x 236 x 753	720 x 470 x 893	546 x 300 x 767	520 x 215 x 700	546 x 300 x 767
Net weight (kg)	123	130	90		85
Main accessories					
Indenter	Hard alloyed ball indenter Ø2.5mmx1 Ø5mmx1 Ø10mmx1		Diamond Rockwell x 1, Diamond Vickers x 1 Hardmetal ball indenter Ø1.5875mm x 1, Ø2.5mmx1, Ø5mm x 1		Diamond Rockwell x 1, Diamond Vickers x 1 Hardmetal ball indenter Ø1.5875mm x 1
Testing table	Big / small / V, 1 for each		Big/medium/V, 1 for each		
Hardness block	HBW 3000/10 150~250 x 1, HBW 1000/10 75~125 x 1, HBW 187.5/2.5 150~250 x 1	HBW 3000/10 150~250 x 1, HBW 750/5 75~125 x 1	HRC high, HRC low, HRB block 1 for each, Brinell block x 1 Vickers block x 1		Superficial Rockwell block x 3 Vickers block x 1
Weight	-	-	5	5	4
Operation manual	1	1	1	1	1
Printer operation manual	-	-	-	-	-
Microscope stand	-	-	1	1	1
Reading microscope	20 ^X x 1	-	-	-	-
Micrometer eyepiece	-	15 ^X x 1 (digital)	15 ^X x 1		
Testing table for microscope	-	-	sliding / Pyramidal / V shaped 1 for each	sliding / V shaped 1 for each	sliding / Pyramidal / V shaped 1 for each
Objective	-	-	2.5 ^X x 1, 5 ^X x 1		5 ^X x 1, 10 ^X x 1

PORTABLE ROCKWELL HARDNESS TESTER

M-SERIES

M-series portable hardness testers are high accurate and reliable for measuring hardness of metal materials, especially for the measurement of work piece on site, it makes measurement convenient and easy. The M-series hardness testers are worked on the principle of Rockwell and Brinell, which complies to the ASTM E-110 standards. With different dimension, opening and throat depth, we have several models to fit smaller or bigger workpiece.

M1



Opening: 25mm
Depth: 25mm

M1S



(*Superficial*) for Rockwell N and T scales
Opening: 25mm
Depth: 25mm

M1ST



For *Superficial* testing small diameter tubing with walls. Anvil fits into 3/6" I.D. and larger. Rockwell 15-T scale only.

M2



Opening: 50mm
Depth: 50mm

M2S



(*Superficial*) for Rockwell N and T scales
Opening: 50mm
Depth: 50mm

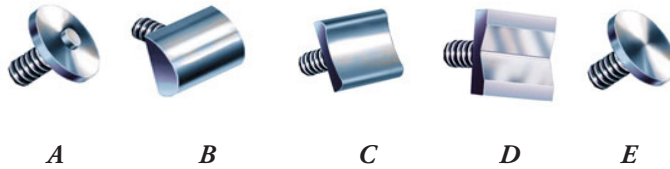
Accessories

Bench Stand



Cast iron for solid support. Holds tester at a convenient angle, freeing hands for ease of use. Inner fibre sleeve won't scuff tester handle.

Anvils



The correct anvil helps you get the reading right the first time.

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

Penetrators



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

Extensions



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

Test Blocks



Traceable test specimens are essential for getting good tests. We provide only certified test blocks to users.

Portable Rockwell Hardness Tester

Standard package

Main unit	1
Bench stand	1
Diamond penetrator	1
Steel ball penetrator, Ø1.588mm	1
Test block	3
Flat anvil	1
V anvil	1
Extension	1
Operation manual	1
Carrying case	1

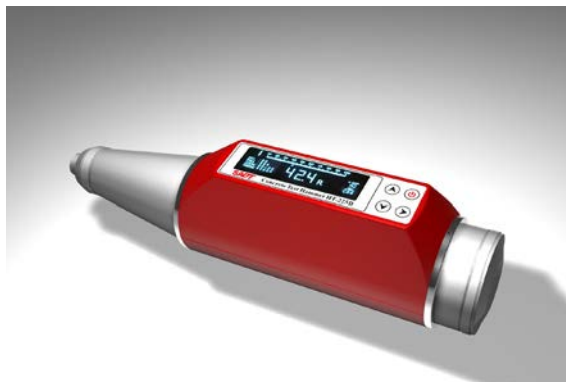
Optional accessories

Bench stand	
Test block	
Diamond penetrator, 120°	
Steel ball penetrator, Ø1.588mm	
Steel alloy ball penetrator, Ø1.588mm	
Steel ball penetrator, Ø3.175mm	
Flat anvil, 1/2"	
Flat anvil, 1"	
V anvil, 1/2"	
V anvil, 1"	
V anvil, 1-1/2"	
Cylindrical anvil, 1/2"	
Cylindrical anvil, 1"	
Cylindrical anvil, 1-1/2"	
Convex anvil, 1/2"	
Convex anvil, 3/4"	
Convex anvil, 1"	
Raised flat anvil, 1/2"	
Raised flat anvil, 1"	
Diamond raised flat anvil, 1/2"	
Extension, 1/2"	
Extension, 3/4"	
Extension, 1"	
Extension, 2"	
Lens	

DIGITAL CONCRETE TEST HAMMER

HT-225D/HT-75D/HT-20D

HT-225D is an integrated digital concrete test hammer which combines data processor and test hammer into one unit. It is widely used for non destructive testing quality of concrete and building materials in finished structure or prefabricated blocks. From its rebound value, the compressive strength of concrete can be calculated out automatically. All testing data can be stored in memory and transferred to PC by USB cable or wireless by Blue tooth. ●



KEY FEATURES

- ✦ High contrast OLED display
- ✦ All setup can be made on site
- ✦ Automatic calculating compressive strength
- ✦ Automatic correction of impact direction
- ✦ All data will be stored in memory
- ✦ All data can be transferred to PC by USB cable or blue tooth(optional)
- ✦ Dual display for analogue ruler and digital value

Specifications

Model	HT-225D	HT-75D	HT-20D
Display	OLED digital		
Measuring range	10-100N/mm ²		1-25N/mm ²
Accuracy	±0.1R		
Impact energy	0.225kgm (2.207Nm) for testing ordinary building and bridge construction	0.075kgm (0.735Nm) for testing small and impact-sensitive parts of concrete or artificial brick	0.020kgm (0.196Nm) for testing mortar or clay of products
Communication	USB2.0 or Bluetooth(optional)		
Storage	data for 4000 concrete structures		
Operating temperature	-40°-60°C		
Power supply	3.7V Li-ion rechargeable battery charged via USB port		
Dimension (mm)	280x75x60		
Net weight	1.1kg		

Standard package

HT-225D/HT-75D/HT-20D main unit	1
Grinding wheel	1
USB cable	1
USB charger	1
Software CD	1
Operation manual	1
Carrying case	1

Optional accessory

Bluetooth module

CONCRETE TEST HAMMER HT-225A/HT-75/HT-20

Standard package - HT-225A

HT225A main unit	1
Grinding wheel	1
Operation manual	1
Carrying case	1

Standard package - HT-75

HT75 main unit	1
Grinding wheel	1
Operation manual	1
Carrying case	1

Standard package - HT-20

HT20 main unit	1
Grinding wheel	1
Operation manual	1
Carrying case	1

When testing the strength of concrete, the concrete test hammer uses a certain elastic force to transmit the impact force of an impact hammer to the surface of concrete, its initial kinetic energy redistributes, a part of energy in the form of plastic deformation or residual deformation is adsorbed by the concrete, and another part of energy which is proportional to the surface hardness is transmitted to the impact hammer, making the hammer resile to a certain height, then the strength of the concrete is derived from the proportional relation between the height of resilience and the concrete strength.

With the merits of simple structure, easy correction, maintenance and repair, and portability, the concrete test hammer is widely used in civil engineering and construction industry for testing the strength of concrete. Compared to other nondestructive testers, the concrete test hammer is an economical and practical nondestructive testing instrument.

HT-225A is used for testing the strength of various concrete members (slab, beam, column, truss) of normal building strength and bridge.

HT-75 is used for testing small and impact-sensitive parts of concrete or artificial brick.

HT-20 is used for testing mortar or clay of products. ●



HT-20/HT-75

Specifications

Model	HT-225A	HT-75	HT-20
Measuring range	10-70N/mm ²		1-25N/mm ²
Impact energy	0.225kgm (2.207Nm)	0.075kgm (0.735Nm)	0.020kgm (0.196Nm)
Maximum breakdown friction of rider	0.49-0.78N(50-80g)	0.5±0.10N	
Meanvalue of steel-anvil rating of hammer	80±2	74±2	
Punch advance for impact hammer	75mm		
Application	for testing ordinary building and bridge construction	for testing small and impact-sensitive parts of concrete or artificial brick	for testing mortal or clay of products
Dimension (mm)	φ60x280		
Net weight	1.0kg		
Standards	ISO/DIS 8045, EN 12504-2, ENV 206, DIN 1048 part 2, ASTM C 805, ASTM D 5873, NFP 18-417, B 15-225, JGJ/T 23-2001, JJG 817-1993		



HT-225A

HIGH STRENGTH TEST HAMMER

HT-1000

When testing the strength of concrete, the concrete test hammer uses a certain elastic force to transmit the impact force of an impact hammer to the surface of concrete, its initial kinetic energy redistributes, a part of energy in the form of plastic deformation or residual deformation is adsorbed by the concrete, and another part of energy which is proportional to the surface hardness is transmitted to the impact hammer, making the hammer resile to a certain height, then the strength of the concrete is derived from the proportional relation between the height of resiliance and the concrete strength. With the merits of simple structure, easy correction, maintenance and repair, and portability, the concrete test hammer is widely used in civil engineering and construction industry for testing the strength of concrete. Compared to other nondestructive testers, the concrete test hammer is an economical and practical nondestructive testing instrument.

HT-1000 is used for testing the strength of high-strength building components, bridges and concrete structures (plates, beams, columns, bridge).



High Strength Hammer

Standard package

HT-1000 main unit	1
Grinding wheel	1
Operation manual	1
Carrying case	1

KEY FEATURES

- ✦ Center oriented rod using imported materials with high precision, wear-resistant;
- ✦ Superhard Al-alloy housing to avoid damage of instrument in-site and to extend the instrument's life;
- ✦ Pointer slider with external spring ring structure, it is not only convenient for the friction adjustment, but also ensures that the friction force for pointer shaft and slider is uniform, and to ensure the accuracy of the instrument.

Specifications

Model	HT-1000
Measuring range	50-80Mpa
Impact energy	1kgf.m (9.8J) for testing ordinary building and bridge construction
Meanvalue of steel-anvil rating of hammer	83±2
Punch advance for impact hammer	140mm
Maximum breakdown friction of rider	0.5-0.8N
Stiffness of strike tension spring	10N/cm
Dimension (mm)	Ø65*486
Net weight	3.5kg
Standards	ISO/DIS 8045, EN 12504-2, ENV 206, DIN 1048 part 2, ASTM C 805, ASTM D 5873, NFP 18-417, B 15-225, JGJ/T 23-2011, JJG 817-1993

PORTABLE VIBRATION METER

EMT220

Standard package - EMT220

EMT220 main unit	1
Short feeler lever (only for integrated type)	1
Acceleration transducer (only for separate type)	1
Transducer connection cable (only for separate type)	1
Thermo electro couple transducer (only for EMT220 with temperature measuring function)	1
6F22 cell	1
Operation manual	1
Carrying case	1

Optional accessories

Long feeler lever
Earphone Leather sheath
Signal output wire

Vibration transducer:

Integrated, annular shear type acceleration transducer (only for integrated type)

Separate, built-in electric charge amplifier, shear type acceleration transducer (only for separate type)

Temperature transducer:

Type K thermoelectric couple transducer (only for EMT220 with temperature measuring function)

Detector: Root Mean Square

Vibration measurement scale:

Displacement: 0.001~1.999 mm (peak to peak)

Velocity: 0.01~19.99 cm/s (r.m.s. value)

Acceleration: 0.1~199.9 m/s² (peak value)

Vibration acceleration: ≤ 199.9 m/s² (peak value)

Temperature measurement scale:

-20~400°C(only for EMT220 with temperature-measuring function)

Accuracy:

Vibration measurement: ±5% Measurement value; ±2 Digits

Temperature measurement: ±1% Measurement value; ±1 Digit

Vibration Frequency Range:

10~1 kHz (Normal type)

5~1 kHz (Low frequency type)

1~15 kHz (only at "HI" position for acceleration)

Display: Digits liquid crystal display

Sample period: 1 second

Vibration measurement value readout:



Displacement: Peak to peak value
(r.m.s.×2√2)

Velocity: Root mean square (r.m.s.)

Acceleration: Peak value (r.m.s.×√2)

Readout-keeping function:

Readout of vibration / temperature value can be remembered after releasing the Measure Key (Vibration / Temperature Switch)

Output Signal:

2V AC (peak value) (load resistance above 10 kΩ at full measuring scale)

Power supply:

6F22 9V laminated cell

Battery life about 30 hours for continuous use

Power on / off:

Power up when pressing Measure Key (Vibration / Temperature Switch)

Power automatically shut off after releasing the Measure Key for one minute

Operating condition:

Temperature: 0~50°C

Humidity: ≤ 90% RH

Dimension: 185mm×68mm×30mm

Net weight: 200g



A professional manufacturer in Quality Control & NDT fields

