



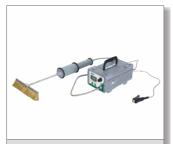






Surface Profile Gages Page 691-692





Holiday Detectors Page 693



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Cross Cut Adhesion Testers Page 699



Digital Adhesion Testers Page 700



Rotational Abrasion Testers Page 701



Paint Film Flexibility Testers Page 701



SUITABLE FOR THIN COATING BELOW 10µm

FOR MAGNETIC AND NON-MAGNETIC SUBSTRATES

COATING THICKNESS GAGE (HIGH PRECISION) CODE ISO-8000FN



calibration foils (included)



zero calibration plate (included)



stand (optional)



eddy current probe N2000 (optional)



eddy current probe N1500 (optional)



- Can measure thickness of thin coating below 10µm
- High repeatability
- Magnetic induction probe measures the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate
 Substrate: iron, steel, magnetic stainless steel (not for non-magnetic stainless steel)
 Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
- Eddy current probe measures the thickness of non-conductive coating on non-magnetic metal substrate Substrate: copper, aluminum, zinc, non-magnetic stainless steel Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)
- Maximum, minimum, average and variance values can be calculated automatically



SPECIFICATION

Probe		Magnetic induction probe (included)	Eddy current probe * (optional)		
Measuring range		0~500µm	0~1500μm	0~2000μm	
Resolution		0.1μm (range<100μm) 1μm (100μm≤range≤500μm)	0.1µm (range<100µm) 1µm (100µm≤range<1000µm) 0.01mm (1.00mm≤range≤1.50mm)	0.1µm (range<100µm) 1µm (100µm≤range<1000µm) 0.01mm (1.00mm≤range≤2.00mm)	
Accuracy		±(0.5+2%L)µm L is measuri	ng thickness in μm		
Repeatability		≤(0.2+0.8%L)µm L is measuri	ng thickness in µm	≤(0.2+1%L)µm L is measuring thickness in µm	
Measuring mode		single and continuous			
Measuring interval single mode continuous mode		1.5s	0.8s		
		0.4s	0.4s		
Calibration mode		zero calibration and multi-points calibration (1~5 points)			
Minimum substrate thickness		0.1mm	0.05mm		
Minimum measu	ring area	Ø7mm		Ø25mm	
Minimum radius of curvature workpieces concave surface		1.5mm			
		10mm			
Unit		μm/mil			
Power supply		4×1.5V AAA batteries			
Dimension		148×76×26mm			
Weight		148g			

STANDARD DELIVERY

OTANDARD DELIVERT			
Main unit	1 pc		
Magnetic induction probe	1 pc		
Zero calibration plate	1 pc		
Calibration foils (5.6µm, 11.6µm, 24.6µm, 50.0µm,100µm, 252µm, 390µm)	1 set		
1.5V AAA battery	4 pcs		

Eddy current probe	ISO-8000FN-N1500*
(with zero calibration plate)	ISO-8000FN-N2000
Stand	ISO-8000FN-STAND

^{*}For precision measurement of thin coating below 10μm, please use the stand for eddy current probe



COATING THICKNESS GAGE CODE 9501-1200





FOR MAGNETIC AND NON-MAGNETIC SUBSTRATES







eddy current probe NFE (**optional**) with zero calibration block



magnetic induction probe FE90 for bores and grooves (**optional**)



calibration foils (included)



magnetic induction probe FE10 for large range (**optional**)



zero calibration block for FE (included)



receiver (optional)

- Magnetic induction probe (FE) measures the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate.
 Substrate: iron, steel, magnetic stainless steel (not for non-magnetic stainless steel)
 Coating: zinc, copper, chrome, tin, plastic, powder, paint (not for nickel)
- Eddy current probe (NFE) measures the thickness of non-conductive coating on non-magnetic metal substrate.
 - Substrate: copper, aluminum, zinc, non-magnetic stainless steel Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)
- Tolerance measurement
- Data statistic, including average, variance, maximum and minimum values
- Data can be sent to Excel by connecting to computers via bluetooth or cable of receiver
- Support bluetooth printer
- Automatic power off



SPECIFICATION

Probe type	FE (included) magnetic induction probe	NFE (optional) eddy current probe	FE90 (optional) magnetic induction probe for bores and grooves	FE10 (optional) magnetic induction probe for large range
Measuring range	0~1250μm	0~1250μm	0~1250μm	500~10000μm
Accuracy	±(3%L+1)µm ±(3%L+10)µm	(range≤1250µm) (range>1250µm)	L is measuring thickness in µm	
Resolution	0.1µm (range<10)0μm)		
Resolution	1μm (range≥100μm)			
Measuring mode	continuous and single			
Minimum substrate thickness	0.5mm 0.3mm 0.5mm 2mm			2mm
Minimum measuring area	Ø7mm	Ø5mm	Ø7mm	Ø40mm
Minimum curvature radius of convex workpiece	1.5mm			10mm
Memory	600			
Output	USB			
Power supply	2×1.5V AA batteries			
Dimension	135×77×32mm			
Weight	172g			

STANDARD DELIVERY

Main unit	1 pc
Magnetic induction probe (FE)	1 pc
Zero calibration block for FE probe	1 pc
Calibration foils (50/100/250/500/1000µm)	1 set
1.5V AA battery	2 pcs
Software and USB cable	1 pc

OPTIONAL ACCESSORY

OF HONAL ACCESSORT				
Receiver	ISR-C300-RECEIVER			
Cable of receiver	9501-1200-CABLE			
Bluetooth printer	ISR-C002-PRINTER			
Eddy current probe (NFE) with zero calibration block	9501-1200-NFE			
Magnetic induction probe (FE90) for bores and grooves	9501-1200-FE90			
Magnetic induction probe (FE10) for large range	9501-1200-FE10			

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FOR MAGNETIC AND NON-MAGNETIC SUBSTRATES

COATING THICKNESS GAGE (BASIC TYPE) CODE ISO-1200FN

- Probe is suitable for both magnetic and non-magnetic metal substrates
- Can measure the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate Substrate: iron, steel, magnetic stainless steel (not for non-magnetic stainless steel) Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
- Can measure the thickness of non-conductive coating on non-magnetic metal substrate Substrate: copper, aluminum, zinc, non-magnetic stainless steel Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)

 3 measuring modes: Fe, NFe, Fe/NFe
- Store 9 measuring records
- Small and portable, easy for operation



SPECIFICATION

Measuring range		0~2000μm	
Resolution		0.1µm (range<100µm) 1µm (100µm≤range<1000µm) 0.01mm (1mm≤range≤2mm)	
Accuracy		±(2μm+3%L) L is measuring thickness in μm	
Measure interval		0.5s	
Calibration mode		zero calibration	
Measuring mode		Fe, NFe, Fe/NFe	
Minimum substrate	Fe	0.2mm	
thickness	NFe	0.05mm	
Minimum measuring are	ea	Ø25mm	
Minimum radius of	convex surface	5mm	
curvature workpieces	concave surface	25mm	
Unit		μm/mil	
Power supply		2×1.5V AAA batteries	
Main unit dimension		101×62×28mm	
Probe dimension		71×26×22mm	
Weight		114g	



Fe zero calibration plate (included)



NFe zero calibration plate (included)



standard foil (included)

Main unit	1 pc
Fe zero calibration plate	1 pc
NFe zero calibration plate	1 pc
Standard foil (100µm)	1 pc
1.5V AAA battery	2 pcs

COATING THICKNESS GAGE (BASIC TYPE) CODE ISO-1000FN

- Probe is suitable for both magnetic and non-magnetic metal substrates
- Can measure the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate Substrate: iron, steel, magnetic stainless steel (not for non-magnetic stainless steel) Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
- Can measure the thickness of non-conductive coating on non-magnetic metal substrate Substrate: copper, aluminum, zinc, non-magnetic stainless steel Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating) 3 measuring modes: Fe, NFe, Fe/NFe
- Store 9 measuring records
- Small and portable, easy for operation

SPECIFICATION

SPECIFICATION			
Measuring range		0~2000μm	
Resolution		0.1µm (range<100µm) 1µm (100µm≤range<1000µm) 0.01mm (1mm≤range≤2mm)	
Accuracy		±(2μm+3%L) L is measuring thickness in μm	
Measure interval		0.5s	
Calibration mode		zero calibration	
Measuring mode		Fe, NFe, Fe/NFe	
Minimum substrate Fe		0.2mm	
thickness	NFe	0.05mm	
Minimum measuring a	rea	Ø25mm	
Minimum radius of	convex surface	5mm	
curvature workpieces concave surface		25mm	
Unit		μm/mil	
Power supply		2×1.5V AAA batteries	
Dimension		101×62×28mm	
Weight		79g	

STANDARD DELIVERY

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Main unit	1 pc
Fe zero calibration plate	1 pc
NFe zero calibration plate	1 pc
Standard foil (100µm)	1 pc
1.5V AAA battery	2 pcs

FOR MAGNETIC AND NON-MAGNETIC SUBSTRATES





standard foil (included)



Fe zero calibration plate (included)



NFe zero calibration plate (included)

CALIBRATION FOILS FOR COATING THICKNESS GAGES

- To calibrate or check the accuracy of coating thickness gages
- Increase the measurement accuracy after foil calibration
- Uniformity: ±0.3µm (≤50µm), ±0.6% (>50µm)
 Dimension: 45×30mm (thickness≤2000µm), 50×30mm (thickness>2000µm)
- Supplied with manufacturer inspection certificate

Code	Thickness	Deviation*	Uniformity
9503-FL1	11.5µm	±5%	±0.3µm
9503-FL2	23µm	±5%	±0.3µm
9503-FL3	50.5µm	±5%	±0.6%
9503-FL4	102µm	±5%	±0.6%
9503-FL5	250µm	±5%	±0.6%
9503-FL6	495µm	±3%	±0.6%
9503-FL7	995µm	±2%	±0.6%
9503-FL8	1780µm	±5%	±0.6%
9503-FL9	3725µm	±4%	±0.6%
9503-FL10	7650µm	±2%	±0.6%

^{*}Deviation between the ordered thickness and the thickness marked on the calibration foils when supplied





9503-FL6



X RAY FLUORESCENCE SPECTROMETER (RoHS DETECTOR/ALLOY COMPOSITION ANALYZER/COATING THICKNESS GAGE) CODE XRF-B210

REFER TO PAGE 524~525 FOR DETAILS



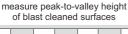


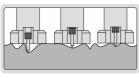


DISPLAY MAXIMUM, MINIMUM, DIFFERENCE VALUE BETWEEN MAXIMUM AND MINIMUM

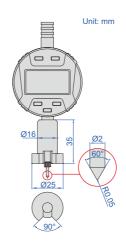
DIGITAL SURFACE PROFILE GAGE











- Measure peak-to-valley height of blast cleaned surface. If the profile is too low, the adhesion of the coating to the surface will be reduced. If the profile is too high, there is the danger that the profile peaks will remain uncoated, allowing rust spots to occur.
- Meet ASTM D 4417-B
- Zero set block is included, set zero before measurement
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- CR2032 battery
- Automatic power off (time is adjustable)
- Data output
- Stainless steel base
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-40M page 13)

Code Range		Digital indicator stroke	Digital indicator resolution	Accuracy
2844-10	0-12.7mm/0-0.5"	12.7mm/0.5"	0.001mm/0.00005"	±0.005mm

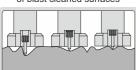




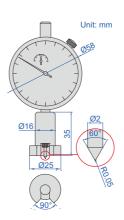
SURFACE PROFILE GAGE



measure peak-to-valley height of blast cleaned surfaces







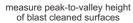
- Measure peak-to-valley height of blast cleaned surface. If the profile is too low, the adhesion of the coating to the surface will be reduced.
 - If the profile is too high, there is the danger that the profile peaks will remain uncoated, allowing rust spots to occur.
- Meet ASTM D 4417-B
- Zero set block is included, set zero before measurement
- Stainless steel base

	Code	Range	Dial indicator stroke	Dial indicator graduation	Accuracy
1	2344-1	0-1mm	1mm	0.001mm	±0.005mm



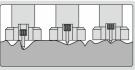
DIGITAL SURFACE PROFILE GAGE

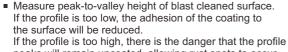




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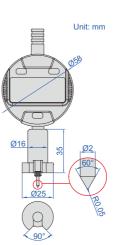
peaks will remain uncoated, allowing rust spots to occur.

- Meet ASTM D 4417-B
- Zero set block is included, set zero before measurement
- Button function: on/off, zero, mm/inch, absolute/incremental measurement
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Stainless steel base
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-40M page 13)

Code	Range	Digital indicator stroke	Digital indicator resolution	Accuracy
2843-10	0-12.7mm/0-0.5"	12.7mm/0.5"	0.001mm/0.00005"	±0.005mm















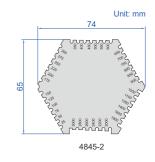
WET FILM GAGES





■ Made of stainless steel





Code	Range	Accuracy	Thickness
4845-1	25-800µm	±5µm	1.8mm
4845-2	25-3000µm	25-100µm: ±5µm 100µm-3000µm: ±5%	1mm

VIDEO

HOLIDAY DETECTOR CODE 9511-HA30



- Inspect anti-corrosion coating status of different thickness with adjustable pulse high-voltage, coating includes insulating paint, glass lining, rubber lining, glass fiber reinforced plastic, coal tar epoxy, etc.
- When the brush with pulse high-voltage moves near the crack, pinhole or thin area on the coating surface, which results in gap gas breakdown and discharge spark, sound and light alarm will appear on the probe and the alarm sound can be heard with the headphone
- LCD display with light-control backlight
- Built-in rechargeable battery, easy to carry and suitable for outdoor inspection
- Automatic power off







flat brush (included)

SPECIFICATION

Measuring range	0.05~10mm (customization for inspecting coating thicker than 10mm is available)	
Output voltage	0.6~30.0kV (stepless adjustable)	
Resolution	0.1kV	
Power	≤5W	
Power supply	12V rechargeable Ni-MH battery	
Dimension	220×130×88mm	
Weight	2.5kg	

Main unit	1 pc
Probe	1 pc
Strip brush <mark>*</mark>	1 pc
Flat brush	1 pc
Ground wire	1 pc
Ground rod	1 pc
Headphone	1 pc
AC/DC adapter	1 pc

^{*}Arc brush and circular probe can be customized

60° GLOSS METER (BASIC TYPE) **CODE 5702-DG6**

- To test the gloss of coating, such as painting, varnish, printing ink, etc.
- To test the material surfaces, such as metal, granite, ceramic, plastic, paper, etc.
- According to ISO 2813, ISO 7668, ASTM D523, ASTM D2457, DIN 67530

 Automatic judgement after setting high and low limits
- Automatic power off

SPECIFICATION

SF ECII ICATION		
Incidence angle	60°	
Measuring range	0~200GU	
Resolution	0.1GU	
Accuracy	±1.5GU (range<120GU) ±1.5% (range≥120GU)	
Repeatability	0.2GU (range<120GU) 0.2% (range≥120GU)	
Zero error	0.1GU	
Measuring area	20×10mm	
Power supply	rechargeable battery	
Data port	USB	
Dimension	135×45×75mm	
Weight	237g	

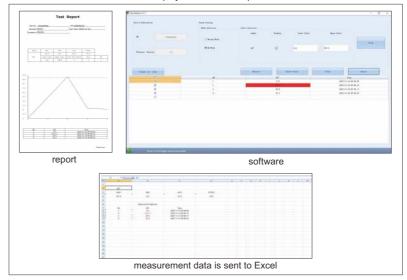
STANDARD DELIVERY

017.11.07.11.0 DZZ.17Z.11.		
Main unit	1 pc	
Base with calibration block	1 pc	
U disk	1 pc	
AC/DC adapter	1 pc	
USB data cable	1 pc	
Cleaning cloth	1 pc	





software (included), test can be controlled from the software, display test data and report



60° GLOSS METER CODE ISQ-DG6

- To test the gloss of coating, such as painting, varnish, printing ink, etc.
- To test the material surfaces, such as metal, granite, ceramic, plastic, paper, etc.
- According to ISO 2813, ASTM D2457, ASTM D523
- Automatic power off

SPECIFICATION

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5. 2011 167 ti 161t		
Incidence angle	60°	
Measuring range	0~150GU	
Resolution	0.1GU	
Accuracy	±1.2GU	
Repeatability	0.4GU	
Zero set error	0.2GU	
Measuring area	20×10mm	
Output	bluetooth	
Power supply	1×1.5V AA battery	
Dimension	123×38×65mm	
Weight	300g	

Main unit	1 pc
Base with calibration block	1 pc
Spare calibration block	1 pc



base with calibration block (included)



connect mobile phone via bluetooth (only Android system)











CAN BE OPERATED BY COMPUTERS OR MOBILE PHONES

20°/60°/85° GLOSS METER **CODE ISQ-DG8**





- To test the gloss of coating, such as painting, varnish, printing ink, etc.
 To test the material surfaces, such as metal, granite, ceramic, plastic, paper, etc.
 According to ISO 2813, ASTM D2457, ASTM D523
- Memory of 10000 measurement results for browsing and output
- Automatic power off



software flash disk (included)

connect to mobile phone via bluetooth (only Android system)

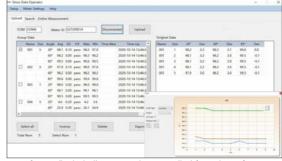


connect to computer via bluetooth or USB cable



SPECIFICATION

Incidence angle	20°	60°	85°
Measuring range	0~2000GU	0~1000GU	0~160GU
Resolution	0.1GU (range≤119.9GU)		
Resolution	1GU (range>119.9GU)		
Accuracy	±1.5GU (range≤119.9GU)		
Accuracy	±1.5% (range>119.9GU)		
Danastahilitu	0.2GU (range≤119.9GU)		
Repeatability	0.2% (range>119.9GU)		
Zero set error	0.2GU		
Measuring area	10×9mm	16×9mm	39×5mm
Output	USB and bluetooth		
Power supply	1×1.5V AA battery		
Dimension	155×48×75mm		
Weight	400g		



software (included), test can be controlled from the software, display test data, output to Excel

017.1107.110 022.172.11		
Main unit	1 pc	
Base with calibration block	1 pc	
Software and USB cable	1 pc	
Bluetooth receiver	1 pc	

SPECTROPHOTOMETER CODE 9710-30

- Concave grating spectrophotometric
- 3.5 inch TFT color LCD, capacitive touch screen,
 256 image element double arrays CMOS image sensor
- D/8 geometrical optics, conforms with CIE No.15, ISO7724/1, ASTM E1164, DIN5033 Teil 7
- Use long life and low power consumption combined LED light source
- Camera locating function, switchable 8mm/4mm aperture, support both SCI and SCE at the same time
- Large capacity storage space, over 20,000 measurement data
- USB port and Bluetooth 4.0
- Two standard observer angles, a variety of illuminant, a variety of color indexes, conforms with a variety of standard colorimetric data
- Measure sample spectra, accurate Lab data, can be used in color matching and accurate color transmission



CONCAVE GRATING SPECTROPHOTOMETRIC



BLUETOOTH





software flash disk (included)



white and black calibration cavity (included)



printer (optional)



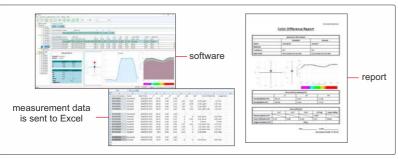
measurement



reflectivity

matching and ac

Optical geometry	reflect: di: 8°, de: 8° (diffused illumination, 8-degree viewing angle)	
Integrating sphere size	Ø48mm	
Light source	combined LED light, UV light	
Spectrophotometric mode	concave grating	
Sensor	256 image element double array CMOS image sensor	
Wavelength range	400~700nm	
Wavelength interval	10nm	
Semiband width	10nm	
Measured reflectance range	0~200%	
Measuring aperture	dual aperture: MAV: Ø8mm; SAV: Ø4mm	
Specular component	SCI&SCE	
Color space	CIE LAB, XYZ, Yxy, LCh, CIE LUV, hunter LAB	
Color difference formula	ΔΕ*ab, ΔΕ*uv, ΔΕ*94, ΔΕ*cmc (2:1), ΔΕ*cmc (1:1), ΔΕ*00v, ΔΕ (Hunter)	
Other colorimetric index	WI (ASTM E313, CIE/ISO, AATCC, hunter), YI (ASTM D1925, ASTM 313), metamerism index MI, staining fastness, color fastness, colorstrength, opacity	
Observer angle	2°/10°	
Illuminant	A, C, D50, D55, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, U30, TI83, TI84, U35	
Displayed data	spectrogram/values, samples chromaticity values, color difference values/graph, PASS/FAIL result, color offset	
Measuring time	2.6s	
Spectral reflectan	MAV/SCI, within 0.08% of standard deviation (400~700nm: 0.18%)	
Repeatability colorimetric value	s MAV/SCI: ΔE*≤0.03	
Inter-instrument error	MAV/SCI: ΔE*≤0.15	
Measurement mode	single measurement, average measurement	
Data port	USB, bluetooth 4.0	
Data storage	standard 1000 pcs, sample 28000 pcs	
Illuminant life span	5 years, more than 3 million times measurements	
Battery	Li-ion battery, 5000 measurements within 8 hours	
Dimension	184×77×105mm	
Weight	600g	



software (included), test can be controlled from the software, display test data, report

STANDARD DELIVERY

OTANDAND DELIVER		
Main unit	1 pc	
White and black calibration cavity	1 pc	
Software and USB cable	1 pc	
AC/DC adapter	1 pc	

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Printer	9710-PRINTER
Powder test box	9710-POWDERBOX
Universal test kit	9710-TESTKIT



- Conforms with CIE No.15, ISO7724-1, ASTM E1164 and DIN5033 Teil7 standards
- Grating spectrophotometric, 3.5" IPS full color screen, dual optical path high precise CMOS array sensor
- Use long life and low power consumption combined LED light source, include UV and exclude UV measurement
- Camera locating function, switchable 11mm/6mm/1×3mm aperture
- Large capacity storage space, over 20000 measurement data
 Two standard observer angles, a variety of illuminant, a variety of color indexes, conforms with a variety of standard colorimetric data
- Measure sample spectra, accurate Lab data, can be used in color matching and accurate color transmission



SPECTROPHOTOMETER CODE 5701-D40

FOUR KINDS OF APERTURE

GRATING SPECTROPHOTOMETRIC





SPECIFICATION

SPECIFICATION			
Optical geometry	D/8 (diffused illumination/8° direction reception), SCI+SCE (specular component included+specular component excluded		
Integrating sphere size	Ø40mm		
Light source	LED (full band balanced LED)+UV		
Spectrophotometric mode	grating		
Sensor	dual optical path high precise CMOS array sensor		
Wavelength range	400~700nm		
Wavelength interval	10nm		
Reflectance measurement range	0~200%		
Reflectance resolution	0.01%		
Display resolution	0.01		
Illumination area/aperture	MAV: Ø11mm; SAV: Ø6mm, Ø3mm; MINI: 1×3mm		
Color space	CIE-Lab, CIE-LCh, HunterLab, CIE Luv, XYZ, Yxy, RGB		
Color difference formula	ΔE*ab, ΔE*cmc, ΔE*94, ΔE*00		
Other colorimetric index	whiteness (ASTM E313-00, ASTM E313-73, CIE/ISO, AATCC, hunter, taube berger stensby), yellowness (ASTM D1925, ASTM 313-00, ASTM E313-73), blackness (My, dM), color fastness, tint (ASTM E313-73) color density CMYK (A, T, E, M), milm, munsell, opacity, color strength		
Observer angle	2°/10°		
Illuminant	A, B, C, D50, D55, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, U30, U35, DLF, NBF, TI83, TI84, Id50, Id65, LED-B1, LED-B2, LED-B3, LED-B4, LED-B5, LED-BH1, LED-RGB1, LED-V1, LED-V2		
Measuring time	about 1.5s		
spectral reflectance	within 0.08% of standard deviation		
Repeatability colorimetric values	ΔE*ab≤0.025 (after whiteboard correction, measuring the whiteboard 30 times at 5s interval)		
Inter-instrument error	ΔE*ab≤0.25 (BCRA series II, average value of 12 color plates)		
Data port	USB, bluetooth		
Light source lifetime	10 years, more than 1 million times measurements		
Battery	3.7V/3000mAh, rechargeable 8000 times continuous tests		
Dimension	95×129×231mm		



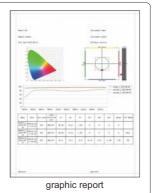


measurement

software (included), test can be controlled from the software, display test data, report







To be continued

Continued from previous page

STANDARD DELIVERY

STANDARD DELIVERT		
1 pc		
1 pc		
3 pcs		
1 pc		
1 pc		
1 pc		



white calibration cavity (included)

connect to computer



COLORIMETER (BASIC TYPE) CODE 5700-LS35

- Conforms with CIE 15, CIE S 005, ISO 7724-1 and ISO 13655 standards
- 3.5-inch IPS display and capacity touch panel
- Contains multiple color cards and can match the closest color code quickly
- QC testing function, can set color difference threshold
- Able to store 1000 colors and 1000 color comparison
- 3.7V/4000mAh battery, 10000 continuous measurements



white calibration cavity (included)



SPECIFICATION

Illumination geometry	D/8, specular component include (SCI)		
Illumination light source	full spectrum LED light source		
Measurement conditions	light source D65, field of view 10°		
Measuring time	about 1s		
Color space	CIE Lab, Luv, LCh, Yxy, CMYK, RGB, Hex		
Color difference formula	ΔE*ab, ΔE*uv, ΔE*94, ΔE*cmc (2:1), ΔE*cmc (1:1), ΔE*00		
Repeatability	standard deviation ΔE^* ab is within 0.03 (measurement condition: the average value of 30 measurements on the whiteboard at an interval of 3s after calibration)		
Charging interface	USB (Type-C)		
Dimension	86×63×158mm		
Weight	245g		

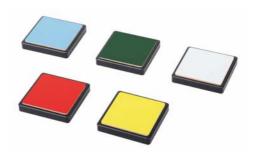


STANDARD DELIVERY

Main unit	1 pc	
White calibration cavity	1 pc	
USB cable	1 pc	
AC/DC adapter	1 pc	
Cleaning cloth	1 pc	
Locating plate	1 pc	

STANDARD COLOR PLATES CODE 5704-CP01

- To calibrate color measuring instruments
- Made of ceramic
- Wear resistance, corrosion resistance, high optical stability
- Supplied with ISO17025 calibration certificate from National Institute of Metrology, China



SPECIFICATION

of Edit Idahlor			
Spectral reflectance factor	spectral reflectance factor in the wavelength range of 380nm to 780nm		
Standard illuminant	A, D65, etc		
Viewing angle	2°, 10°		
Color space	CIE-Lab, XYZ, etc		
Annual variation	Δx, Δy≤0.005		
Dimension	50×50mm		

STANDARD DELIVERY

Protective gloves	1 pair
Calibration certificate	1 pc



calibration certificate (included)

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- For flat coating surfaces
- Conform to ASTM D3363, ISO 15184, BS3900-E19 and ECCA-T4/1



SPECIFICATION

Pressure of pencil on coating	500g, 750g, 1000g (main unit is 500g, one weight is 750g, two weights are 1000g)
Angle between pencil and measured surface	45°
Dimension (L×W×H)	95×80×110mm
Weight	2kg

STANDARD DELIVERY

Main unit	1 pc
Weights	2 pcs
Leveling rod	1 pc
Level	1 pc
Pencil	12 pcs (4B, 3B, 2B, B, HB, F, H, 2H, 3H, 4H, 5H, 6H)
Pencil sharpener	1 pc

OPTIONAL ACCESSORY

Pencil (12 pcs: 4B-6H)	PHT-C751-P
400 grade abrasive paper	PHT-C751-S

PENCIL HARDNESS TESTER **CODE PHT-C751**







level (included)

pencils (included)





leveling rod (included)

weights (included)

CODE ISQ-PK100



- To test the adhesion of paint coating
- DIN53151



CROSS CUT ADHESION TESTER

3mm pitch blade (included)



2X magnifier (included)



2mm pitch blade (included)



1mm pitch blade (included)



brush (included)



test tape (included) ISQ-PK100-1

on metal, wood, plastic, etc. • According to ISO 2409, ASTM D3359,

SPECIFICATION

Blade		1mm pitch	2mm pitch	3mm pitch
Applied paint	on hard substrate (like metal)	0~60µm	61~120µm	121~250µm
thickness	on soft substrate (like wood, plaster)	_	0~120µm	121~250µm
Minimum substrate thickness	hard substrate (like metal)	0.25mm	0.25mm	0.25mm
	soft substrate (like wood, plaster)	-	10mm	10mm
Minimum size of test s	ample	150×100mm 150×100mm 150×100mm		150×100mm
Dimension		170×28×40mm		
Weight 430g				

Handle	1 pc
1mm pitch blade	1 pc
2mm pitch blade	1 pc
3mm pitch blade	1 pc
Test tape (ISQ-PK100-1)	1 pc
2X magnifier	1 pc
Brush	1 pc



step 1: make grid cutting on surface



step 2: paste and remove the tape

		The edges of the cuts are completely smooth; none of the squares of the lattice is detached.	0
		Detachment of flakes of the coating at the intersections of the cuts. A cross cut area not greater than 5% is affected.	,
	Ĭ9	The coating has flaked along the edges and/or at the intersections of the cuts. A cross cut area greater than 5%, but not greater than 15% is affected.	3
羅		The coating has flaked along the edges of the cuts partly or wholly in large ribbons, and/or it has flaked partly or wholly on different parts of the squares. A cross cut area greater than 15%, but not greater than 35% is affected.	1

step 3: according to the shedding status, judge the adhesion grade

DIGITAL ADHESION TESTER CODE SPT-AD21







Ø20mm dolly (included)



glue gun and glue (included)

- Pull-off test
- Built-in rechargeable lithium battery, no need external power source
- Portable design, can be used anywhere
- Standard USB interface, can directly transmit the stored data to computer, no need to install software
- Conforms to GB/T 5210, ASTM D4541/D7234, ISO 4624/16276-1
- Store all test results, includes maximum pull-off force, pull-off rate, dolly size and time
- Built in real-time clock, all saved data have corresponding date and time
- Selectable four different sizes dolly for different resolution and testing range
- No need conversion, the instrument can calculate pull-off force according to the dolly size
- Get the testing results from LCD directly
- Two units MPa and psi for selection and can be converted automatically



cutting tool (included) for Ø10mm, Ø14mm, Ø20mm dolly

SPECIFICATION

Range	0~20MPa
Dolly diameter	Ø20mm
Resolution	0.01MPa (1psi)
Accuracy	±1% full scale
Pull-off force	0.7~20MPa
Power	built-in rechargeable lithium battery
Dimension (LxWxH)	360x75x115mm
Weight	3kg

STANDARD DELIVERY

Main unit	1 pc
Ø20mm dolly	20 pcs
Cutting tool	1 pc
Charger	1 pc
USB cable	1 pc
Glue gun	1 pc
3M glue	1 pc

Ø10mm dolly	SPT-AD21-10	10 pcs/package pull-off force: 2.8~80MPa
Ø14mm dolly	SPT-AD21-14	10 pcs/package pull-off force: 1.4~40MPa
Ø20mm dolly	SPT-AD21-20	10 pcs/package pull-off force: 0.7~20MPa
Ø50mm dolly	SPT-AD21-50*	10 pcs/package pull-off force: 0.4~3.5MPa
Cutting tool	SPT-AD21-CUTTER1	for Ø10mm, Ø14mm, Ø20mm dolly
Cutting tool	SPT-AD21-CUTTER2*	for Ø50mm dolly
Sleeve	SPT-AD21-SLEEVE *	for Ø50mm dolly
Glue	SPT-AD21-GLUE	3M DP420 epoxy glue/50ml

^{*}Ø50mm dolly requires corresponding cutter and sleeve



ROTATIONAL ABRASION TESTER CODE QMY-AP32

- To test flat paint film
- Comply with ISO 7784-2, ISO 9352, GB/T1768, ASTM D3884, ASTM D1175 standards

SPECIFICATION

60±2 r/min, 72±2 r/min (selectable)	
500g, 750g, 1000g	
Ø100mm	
external diameter (51.6±0.1)mm, thickness (12.7±0.1)mm	
0~9999 times	
25W	
220V, 50Hz	
260×410×280mm	
14kg	



STANDARD DELIVERY

Main unit	1 pc
Vacuum cleaner	1 pc
1000g weight	2 pcs
750g weight	2 pcs
500g weight	2 pcs
TABER CS-10 grinding wheel	1 pair
Sandpaper	10 pcs
Glass plate	5 pcs

OPTIONAL ACCESSORY

TABER CS17 grinding wheel (1 pair)	QMY-AP32-CS17
Glass plate (Ø100mm with a 9mm center hole, 100 pcs/box)	QMY-AP32-GP
Aluminum plate (Ø100mm with a 9mm center hole, 100 pcs/box)	QMY-AP32-AP
180# emery cloth strip (100 pcs/box)	QMY-AP32-EC

PAINT FILM FLEXIBILITY TESTER **CODE PPF-BF62**

- To test the flexibility of paint and varnish
 Bend the coated test plates on the shaft rods with different diameter, the minimum shaft rod diameter that does not cause damage to the film is the film flexibility



SPECIFICATION

OI LOII IOATION	
Shaft rod length	35mm
Shaft rod 1	Ø15mm
Shaft rod 2	Ø10mm
Shaft rod 3	Ø5mm
Shaft rod 4	Ø4mm
Shaft rod 5	cross section 3×10mm, radius of curved surface 1.5mm
Shaft rod 6	cross section 2×10mm, radius of curved surface 1.0mm
Shaft rod 7	cross section 1×10mm, radius of curved surface 0.5mm
Dimension	450×75×100mm
Weight	3.1kg



STANDARD DELIVERY

ON WEST WED DEELVERY	
Main unit	1 pc
Test plate	1 box (500 pcs)
4X magnifier	1 pc

Test plate (dimension: 120×25×0.28mm, 500 pcs/box)	PPF-BF62-T



300g main weight (included)



1000g main weight (included)



2lb main weight (included)



2lb additional weight (included)



1000g additional weight (included)



Ø16.3mm die base (included)

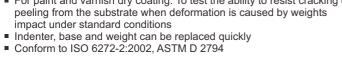


Ø12.7mm indenter



Ø15.9mm indenter

- For paint and varnish dry coating. To test the ability to resist cracking or peeling from the substrate when deformation is caused by weights



SPCIFICATION

SPCIFICATION	
Impact height range	0-100cm (0-40inch)
Graduation	1cm
Impact depth	2.5cm
Weight	1000g (2 pcs), 300g (1 pc), 2lb (2 pcs)
Indenter diameter	Ø12.7mm (1/2 inch DIA), Ø15.9mm (5/8 inch DIA)
Die base diameter	Ø16.3mm

OPTIONAL ACCESSORY

OF HONAL ACCESSORT	
Base plate (120×70×0.5mm, 180 pcs/box) *	THD-PF34-T

^{*}Can be customized according to the needs of different thickness, size and processing





STANDARD DELIVERT	
Main unit	1 pc
1000g main weight	1 pc
300g main weight	1 pc
2lb main weight	1 pc
1000g additional weight	1 pc
2lb additional weight	1 pc
Ø12.7mm indenter	1 pc
Ø15.9mm indenter	1 pc
Ø16.3mm die base	1 pc