

Coating Thickness Gauge - EC – Colour

DESCRIPTION:

This series of thickness gauge can nondestructive measure the thickness of non-conductive coatings on metal surfaces and non-ferromagnetic metal coatings on ferromagnetic metals (e.g. iron, nickel, cobalt, etc.), including measuring the thickness of iron, stainless steel surface paint or galvanized layer, measuring the thickness of aluminum, copper surface paint or plastic film.

EC-Colour is with a External probe, magnetic induction and eddy current effect external probe, measuring range is 0~2000um and measuring accuracy is $\pm(2\%+1\mu\text{m})$, resolution is up to 0.1um.

EC-Colour is highly anti-interference and can work in complex electromagnetic field. During measurement, the user needs to quickly attach the end of probe to the surface of the object being measured, during the process of the probe shrinking into the instrument, the instrument can automatically distinguish the properties of the substrate and measure the thickness of the coating (plating) layer. The measurement results can be sent to the APP in real time by Bluetooth. Besides, with big memory card, the gauge record data automatically. And records could be sent to computer by USB.

EC-Colour has a strong data processing ability, can display a variety of statistics map and data, and can indicate and alert the over-limit situation. The instrument integrates AI technology and adds the functions of environment self-adaptation and self-protection. The instrument is with a simple standardized menu interface on the large color screen. The realization of many advanced technology and schemes has greatly enhanced the user's sense of human-computer interaction experience.

FEATURES :

- Double principle in one, ruby probe
- 2.4 inch color screen
- With Bluetooth and APP function
- far or general mode
- High resolution 0.1um
- High accuracy $\pm(2\%+1\text{um})$
- Measuring range is 0~2000um (other ranges can be customized)
- Statistic analysis of data
- Standardized menu interface
- Display a curve, bar chart or trend chart
- Support zero calibration and multi-point calibration
- The maximum speed is 2 times/r>
- Self-adaptive back light brightness
- Automatic rotation screen
- Sound volume adjustable
- Red LED alarm, blue and green LED status reminder
- Auto power-off
- Low power protective

EC -7 Coating Thickness Gauges

These gauges can be used for non-destructive coating thickness measurement of non-magnetic coatings, e.g. paint enamel, chrome on steel, and insulating coatings, e.g. paint and anodizing coatings on non-ferrous metals.

[Features and Functions]

- Range 0~2000um, accuracy $\pm(2.5\% \pm 1)\mu\text{m}$
- 128*128dots LCD display
- Menu interface
- LCD can be rotated to be used easily
- Red LED alarm indication
- LCD shows mean, maximum, minimum and standard deviation
- User can set alarm limit
- Readings can be stored, recalled and deleted
- Easy to do zero calibration and support multi-point calibration
- Connect with PC via USB and download readings
- Multi-language supported
- Up to 5 measurement groups supported
- Automatically detect the substrates type(F or N)
- Unit optional: um, mm and mils



[Applications]

Coating thickness testing for car paint, electroplating, surface technology, pipeline anti-corrosion coating, mechanical equipment surface anti-corrosion, chemical equipment and quality control.

[Specifications and Selection Guide]

Probe type	Built In - Fe / NFe
Principle	Magnetic induction / Eddy currents
Range	0~2000um
Accuracy	$\pm(2.5\% + 1\mu\text{m})$
Resolution	0-99.9um(0.1m), others(1um)
Readings memory	320
Interface: USB	
Power supply: Two 1.5v AAA batteries	
Operation environment: -10 to 50°C	
Storage environment: -10 to 60°C	
Certificate and standard: CE, ROMS. ISO 2178, 2360, GB/T 4956-2003, 4957-2003	
Size and weight 113mmX53mmX24mm 80g	

Coating Thickness Gauge - Blue-tooth Application

<p>NOTE:</p> <ul style="list-style-type: none"> Best operation environment is in 25°C and 40% RH~60% RH. Sun exposure avoided. Corrosive chemicals avoided. Prevent the device from railing out. 	<p>WARNING:</p> <ul style="list-style-type: none"> Self-disassemble is not allowed! No surge with heavy currents/static electricity!
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SPECIFICATION:

Model	EC-Colour	
Probe type	External probe	
Measuring Principle	Fe: Magnetic induction; NFe: Eddy currents	
Measuring range	0~2000um	
Accuracy	±(2%+lum)	
Resolution	0.1um (0~100um); 1um (>100um)	
Unit	nm, mm, mils, inch	
Calibration	Zero calibration and multi-point calibration	
Statistic	Number of readings, Max, Min, Mean, sample standard deviation, coefficient of variation, number below limit, number above limit	
Chart	Curve, bar chart or trend chart	
Storage	10*13*10 measurement data	
Probe trigger mode	Mechanical trigger, trigger force: 0.4~0.8N	
Minimum curvature radius	Convex 5mm Concave 25mm	
Minimum measuring area	Diameter 15mm	
Minimum thickness of substrate	Fe: 0.20mm; NFe: 0.03mm	
Maximum measuring rate	2 readings/s	
Display	2.4 inch color screen	
Bluetooth & APP	Support	
Operation environment	Temperature: -10~+50 C; Humidity: 20~90%RH (Non-condensation)	
Storage environment	Temperature: -20~+60 C; Humidity: 20~90%RH (Non-condensation)	
Power supply	2 pcs 1.5V AA alkaline batteries; 2 pcs 1.2V AA rechargeable batteries	
Protection class	IP40	
Size	146*76*32mm	Housing: 146* 76* 32mm Wire: <D3.5*1000mm Probe: (D17*67mm)
Material	ABS	Housing: ABS Probe: stainless steel

Weight	About 137g (No battery)	Housing: about 137g (No battery) Probe: about 63g
Standards	Confirms to CE.ROHS.ISO 2178,2360,GB/T 4956-2003,4957-2003,JIG-818-2005, ISO 2178/2360/2808, ISO 19840, ASTM B244/B499/D1186/D1400/D7091/E376/G12, BS 3900-C5, SSPC-PA2, US Navy NAVSEA PPI 63101-000, US Navy NAVSEA 009-32, AS 2331.1.4, AS3894.3-B and others.	
Warranty	12 Months	

Classic Enterprises

ITEM	UNIT	SPECIFIED RANGE	METHOD
Acid Value	mg KOH/g	207-211	GB/T 9104-2008/6
Saponification Value	mg KOH/g	208-212	GB/T 9104-2008/5
Iodine Value	g I ₂ /100g	<0.5	GB/T 9104-2008/4
Melting point	°C	53-57	GB/T 617-2006
Colour	Hazen	<60	GB/T 9104-2008/7
Moisture	%	<0.2	GB/T 606-2003
Carbon Chain			
C12+C14	%	<1.5	GB/T 9104-2008/12
C16	%	52-59	
C18	%	40-44	
Other	%	<1	

Certificate of Analysis

Certificate No. MERRID20220807		Issue Date: 7th August, 2022	
Chemical name	Methyl Hydroxy Ethyl Cellulose-ME 100		
Lot number	SMNM20220807-4	Lot weight	21,000 KGS
Produced date	7th, August, 2022	Expiry date	6th, August, 2024
Shelf Life: At least 2 years under dry and cool condition			

Inspected the above mentioned product and results as following			
Item	Unit	Specification	Result
Appearance	/	white powder	white powder
Moisture content	%	≤5.0	4.7
PH value	/	5.0-8.0	7.0
Viscosity	m.Pa.	90,000-110,000	105,000
Viscosity test method: 2% water solution, at(20±0.2)t:, NDJ-4.			

Conclusion
All analysis results comply with the requirements of the ordered product.