

HC Series Digital Coating Thickness Gauge

ITEM NO.

HC-200

HC-210

HC-220



Patent NO.:ZL201230277872.4

Packing Box

HC series of coating thickness tester is to use the eddy current thickness method and electromagnetic thickness method of portable coating thickness gauge. It can quickly, no damage and precision to coating, cladding material thickness measurement. Both can be used in the laboratory, also can be used in the engineering field. It can be widely used in manufacturing, metal processing industry, chemical industry, commodities inspection etc. Measuring magnetic metal substrate condition (such as steel, iron, alloy and hard magnetic steel, etc.) on nonmagnetic layer thickness (such as zinc, aluminum, chromium, copper, rubber, paint, etc.) and Nonmagnetic metal substrate (such as copper, aluminum, zinc, tin, etc.) on the conductive layer thickness (such as rubber, paint, plastic, anodic oxidation film, etc.)

Main Characteristics

1. Using both the magnetic and eddy current thickness method, as well as measuring the thickness of the magnetic non-magnetic coating on metal substrates can measure the non-magnetic again the thickness of the conductive coating on metal substrates;
2. With two measurement methods: continuous measurement methods (pieces CONTIN E) and word measurement mode (SINGLE);
3. With two works: direct mode (Direct) and burst mode (App1);
4. With five statistics: MEAN, MAX, MIN, NOS, DEV;
5. Two methods can be used together for calibration, basic calibration method and can be used to modify the system error of measuring head;
6. With functions of storage: in storage 500 observed value;
7. Delete function: in the measurement of single suspicious data to delete, can also delete all data storage area for the new measurement;
8. Can be set limits: the measured value beyond the limit alarm automatically; And can be used histogram analysis of a batch of measurements;
9. Have print function: can print measurement, statistics, limit, histogram;
10. Can have a communication with a PC with: measurement, statistics can be transfer to the PC, so that the data for further processing;
11. With functions of power supply undervoltage instruction;
12. Operating projects hum tips;
13. Have error function, through the screen or hum errors;
14. two kinds of shutdown mode: Manual shutdown mode and automatic shutdown mode;
15. Dimension: 140×65×30mm
16. Weight: 0.2kg

Series spec parameters

Measuring head type		HC-210(Magnetism F)	HC-220 (Eddy current N)	HC-200(Global function FN)
Operating Principle		Magnetic induction	Whirlpool	Magnetic induction+whirlpool
Measurement Range(μm)		0~1250	0~1250 Chromium plating on copper(0~40)	0~1250 Chromium plating on copper(0~40)
Lower limit of resolution(μm)		0.1 μm (0-100) , 1 μm (100-1250)		
Display NO.		Background, the four books, according to two lines of statistics show		
Calibration		Manufacturer for the calibration, zero calibration, the calibration foil calibration		
Display NO.	One point calibration(μm)	$\pm(3\%H+1)$	$\pm(3\%H+1.5)$	$\pm(3\%H+1)\pm(3\%H+1.5)$
	Two point calibration(μm)	$\pm[(1\sim3\%H)+1]$	$\pm[(1\sim3\%H)+1.5]$	$\pm[(1\sim3\%H)+1]\pm[(1\sim3\%H)+1.5]$
Test Strip	Minimum radius of curvature(μm)	Convexity 1.5mm,Camber concave 3mm		
	Diameter of the minimum value(mm)	Φ7	Φ5	Type FΦ7, Type NΦ5
	Critical thickness of substrate(mm)	0.5mm	0.3mm	Type F 0.5mm, Type N0.3mm
Operating Environment		Temperature: 0℃-40℃		
		Humidity: 20%RH-90%RH		
		Without a strong magnetic field environment		
Overall Dimension		137×66×23		

Coating Matrix	Organic materials and other non-magnetic coating (such as: paint, coatings, plastics, enamel and anodized, etc.)	Non-magnetic non-ferrous metal layer (such as: chromium, zinc, aluminum, copper, tin, silver, etc.)
Magnetic metals such as iron and steel	F type probe measurement range: 0 μm-1250 μm	F type probe measurement range: 0 μm-1250 μm
Such as copper, aluminum, brass, tin, zinc and other non-ferrous metals	N type probe measurement range: 0 μm-1250 μm	N type probe is used only for chromium plating on the copper measurement range: 0 μm-40 μm