



PRODUCT DATA SHEET

Coating Thickness Gauge

EC-470A / EC-470B

The EC-470A and EC-470B thickness gauge has a built-in magnetic induction and eddies current effect integrated probe, which can non- destructively measure the thickness of non-conductive coatings on metal surfaces and non-ferromagnetic metal coatings on ferromagnetic metals (such as iron, nickel, cobalt). Specific uses include measuring the thickness of the paint or galvanized layer on the surface of iron and stainless steel and the thickness of the paint or plastic film on the surface of aluminum and copper.

EC-470A and EC-470B have a measurement range of 0~2000 μm , with a resolution of up to 0.1 μm . When measuring, the user only needs to quickly fit the probe tip to the surface of the object to be measured. When the probe shrinks into the instrument, the instrument can automatically distinguish the properties of the substrate and measure the thickness of the coating (plating) layer.

EC-470A and EC-470B have a streamlined data display interface. EC-470A uses a black and white segment LCD screen for outdoor or high-light environments. The EC-470B uses a color segment LCD screen for indoor or low-light environments.



FEATURES:

- Ruby probe
- Resolution up to 0.1 μm
- Accuracy $\pm(3\%+1\mu\text{m})$
- Measuring range 0~2000 μm
- Support continuous measurement
- Zero calibration function
- Iron putty power identification
- Iron-galvanized substrate recognition
- Battery protection
- Manually rotate the screen
- Automatic shut-down
- Reaction time less than 0.5 seconds

APPLICATION:

- Car paint thickness detection
- Shipbuilding
- Metal anti-rust treatment
- Film thickness detection
- Hardware parts processing

Model	EC-470A	EC-470B
Probe type		Internal
Measuring principle	Fe: Magnetic induction; NFe: Eddy currents	
Measuring range	0~2000μm	
Accuracy	±(3%+1μm)	
Resolution	0.1μm(0~100μm); 1μm(>100μm)	
Unit	μm, mm, mil	
Iron putty power identification range	0~1000μm	
Iron-galvanized substrate recognition range	3~500μm	
User calibration method	Zero calibration	
Probe triggering force	0.5~1.2N	
Minimum measurement area	Diameter 15mm	
Minimum substrate thickness	Fe: 0.30mm; NFe: 0.05mm	
Maximum measuring speed	2 readings/sec	
Display	black and white segment LCD screen	color segment LCD screen
Operating environment	-10~50°C	
Storage environment	-20~60°C	
Power supply	2 pcs AAA 1.5V alkaline batteries; 2 pcs AAA 1.2V rechargeable batteries	
Protection class	IP40	
Dimensions	102*53.6*25mm	
Material	ABS	
Weight	About 75g (without batteries)	