Max 37.6 Min 36.8 Avg 37.0 Stdev 0.6

37.0 μm

5/9 NFe

Application

" LS225 coating thickness gauge is composed of LS225 host and two probes. At present, the host can support F500 ferrous probe and N1500 non-ferrous probe. The design of ultra-small probe is especially suitable for the measurement of thin coating on small workpieces such as nails and bolts and the anodized layer on aluminium. "

Metal substrate	Coating material	Examples	Probe
Ferromagnetic material: Iron, cobalt, nickel, gadolinium	Non-ferromagnetic metal: copper, aluminum, brass, etc.	Galvanized iron, copper-plated iron	F500
	Non-metallic materials: paint, coating, plastic, etc	Iron spray paint, iron spray powder coating	F500
	Ferromagnetic material: Iron, cobalt, nickel, gadolinium	Iron nickel plated	❌
Non-ferromagnetic metal: Copper, aluminum, brass, etc	Non-conductive material: anodized, paint	Aluminum anodizing, copper painting	N1500
	Conductive material: various types of metals	Copper chrome plating, copper zinc plating	❌

LS225 Host   F500 Ferrous Probe   N1500 Non-ferrous Probe

◆ **Core Advantages**

1. Pen-shaped probe make it suitable for measuring special-shaped and small workpieces
2. Using digital oscillation technology, high-speed ADC acquisition
3. Digital probe and temperature compensation make the data more accurate and stable
4. Support zero adjustment and multi-point calibration (Equipped with standard films)
5. Automatically count the maximum, minimum, average and standard deviation
6. Dedicated test fixture (optional) can eliminate human errors

Measure small size materials   Measure thin coating below 10µm

Measure special-shaped materials   With test fixture repeatability up to 0.1µm

◆ **Cases**

LS225+F500 measure ultra-thin coating

LS225+N1500 measure anodized layer

Probe Model	F500 Ferrous Probe	N1500 Non-ferrous Probe
Measuring Principle	Magnetic	Eddy Current
Substrate	Ferromagnetic metal	Non ferromagnetic metal
Measuring Range	0.0-500µm	0.0-1500µm
Measuring Interval	1.5s	0.8s
Resolution	0.1µm:(0µm - 99.9µm) 1µm:(100µm - 500µm)	0.1µm:(0µm - 99.9µm) 1µm:(100µm - 1000µm) 0.01mm:(1.00mm – 1.50mm)
Repeatability	≤ ± (0.8% reading + 0.1µm) test with fixture	
Accuracy	≤±(2% reading+0.3µm) after 5 points calibration	
Unit	µm / mil	
Minimum Measuring Area	φ =7mm	
Minimum Curvature	Convex:1.5mm / Concave:10mm	
Minimum Substrate Thickness	0.1mm	0.05mm