Optional Probes and Application Guide

Probe model		F400		F1	F1/90°	F10	N1	CN02
Operating principle		Magnetic induction					Eddy current	
Measuring range (μm)		0-400		0-1250		0-10000	0 to 1250 μm 0 to 40μm (for chrome plate on copper)	10~200
Low range resolution (µm)		0.1		0.1		10	0.1	1
Accuracy	One-point calibration (µm)	±(3%H+1)				±(3%H+10)	±(3%H+1.5)	±(3%H+1)
	Two-point calibration (µm)	±[(1~3)H%+0.7]		±[(1~3)H%+1]		±[(1~3)%H+10]	±[(1~3)%H+1.5]	
Measuring conditions	Min curvature of the min area (mm)	Convex	1	1.5	Flatten	10	3	Flatten
	Diameter of the min area (mm)	φ3		φ7	φ7	φ40	φ5	φ7
	Critical thickness of substrate (mm)	0.2		0.5	0.5	2	0.3	unlimited

Application of two measuring methods

Magnetic induction (F)

Coating: non-magnetic material
Substrate (base): magnetic material

Any non-magnetic materials such as gold, copper, zinc, tin, lead, resin, rubber, glass and so on.

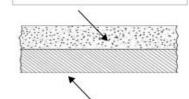
Any magnetic materials such as iron, steel, cobalt and nickel

Eddy current (N)

. Coating: non-conductors

Substrate (base): non-magnetic metals

Any non-conductors such as painting, synthetic resin, rubber, glass and so on



Any non-magnetic metals such as brass, copper, aluminum and so on.

Reference Table for Probe selection

Substrate	Coatings	Non-magnetism coating (Organic materials)	gs	Non-magnetism coatings(nonferrous metals)		
Cabarato		Thickness of coating is more than 100µm	Thickness of coating is less than 100µm	Thickness of coating is more than 100µm	Thickness of coating is less than 100µm	
Steel,iron and other	Diameter of tesitng area is more than 30mm	F1 probe:0~1250 μm F400 probe:0~400μm	F1 probe: 0~1250 μm F10 probe:0~10μm	F400probe:0~400 μm F1probe:0~1250μm	F1 probe: 0~1250 F10µm probe:0~10µm	
magnetism metal	Diameter of testing are is less than 30mm	F400 probe:0~400μm	F1 probe: 0~1250 µm F400 probe:0~400µm	F400probe:0~400µm	F400 probe:0~400 F1 probe:0~1250µm	
Copper,Brass,Aluminum,Zinc, Tin and other metallic	Diameter of testing area is more than 5mm	N1 probe:0~1250µm		N1 probe:0~40µm (For chrome plate on copper)		
Nonmetallic substrate	Diameter of testing are is more than 7mm	-	-	CN02 Probe:10~200µm		