

COATING THICKNESS GAUGE (ADVANCED TYPE) CODE 5402-TC21

TEMPERATURE
COMPENSATION

ONLINE MEASUREMENT
IN REAL TIME

BLUETOOTH

- Magnetic induction probe (FM) measures the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate.
Substrate: steel, iron, alloy, hard magnetic steel, etc.
Coating: zinc, aluminum, chrome, copper, rubber, paint, etc.
- Eddy current probe (NM) measures the thickness of non-conductive coating on non-magnetic metal substrate.
Substrate: copper, aluminum, zinc, tin, etc.
Coating: rubber, paint, plastic, anodized film, etc.
- Real-time temperature compensation guarantees high accuracy, thin plating and oxide layer less than 20μm can be measured accurately
- Reduces the effects of electromagnetic interference and hand-held operation
- Probe can be re-matched after abrasion
- Tolerance measurement with adjustable alarm threshold
- USB and bluetooth interface for data transmission and online measurement in real-time
- Coupling status indication
- Support cable printer



mid-range magnetic
induction probe
FL (OPTIONAL)



high-range magnetic
induction probe
FX (OPTIONAL)



low-range magnetic
induction probe
FS (OPTIONAL)



high-temp magnetic
induction probe
FH (OPTIONAL)



eddy current probe
NM (OPTIONAL)

SPECIFICATION

Probe	FM (included) magnetic induction probe	FL (optional) mid-range magnetic induction probe	FX (optional) high-range magnetic induction probe	FS (optional) low-range magnetic induction probe	FH (optional) high-temp magnetic induction probe	NM (optional) eddy current probe
Range	0~1500μm	0~3000μm	0~10000μm	0~500μm	0~3000μm	0~1500μm
Resolution	0.1μm (<100μm) 1μm (100μm~10000μm)					
Accuracy	zero calibration	±(1μm+2%L)	±(1μm+3%L)	±(2μm+5%L)	±(1μm+2%L)	±(1μm+3%L)
	multi-point calibration	±(1μm+1%L)	±(1μm+2%L)	±(1μm+3%L)	±(1μm+1%L)	±(1μm+2%L)
Measuring mode	single point measurement, scan mode, differential mode, average mode					
Calibration mode	zero calibration, one-point calibration, two-point calibration, multi-point calibration					
Minimum substrate thickness	0.5mm	0.5mm	2mm	0.2mm	0.5mm	0.3mm
Minimum measuring area	Ø7mm	Ø7mm	Ø40mm	Ø3mm	Ø7mm	Ø5mm
Minimum curvature radius of convex workpiece	1.5mm	1.5mm	10mm	1mm	1.5mm	3mm
Applicable surface temperature	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~300°C	0°C~50°C
Data storage	500 groups					
Interface	USB, bluetooth					
Operation environment	-10°C~50°C, 20%RH~90%RH					
Power supply	3×1.5V AAA batteries					
Dimensions (L×W×H)	150×70×30mm					
Net weight	160g					

* L is measuring thickness in μm

STANDARD DELIVERY

Main unit	1 pc
Magnetic induction probe (FM)	1 pc
Zero calibration block for FM probe	1 pc
Calibration foils (12/50/100/250/500/1000μm)	6 pcs
AAA battery	3 pcs
Software and USB cable	1 pc

OPTIONAL ACCESSORY

Eddy current probe (NM) (with zero calibration block for NM probe)	5401-TC11-NM
Mid-range magnetic induction probe (FL)	5402-TC21-FL
High-range magnetic induction probe (FX)	5402-TC21-FX
Low-range magnetic induction probe (FS)	5402-TC21-FS
High-temp magnetic induction probe (FH)	5402-TC21-FH
Cable printer	5401-TC11-PRINTER