

# Coating Thickness Gauge TT270



## Features

- Adopts two measuring methods: magnetism induction(F) and eddy current(N).When F probe is equipped, it can measure the non-magnetic coating on magnetism substrate, when N probe is equipped, it can measure the non-conductive coating on non-magnetism substrate
- 6 types of probes are available for various application: F400、F1、F1/90、F10、N1、CN02
- Two measuring modes: continue/single
- Two working modes: direct mode( DIRECT) and Batch mode (APPL)
- 5 statistical ways: Mean values/Max.values/Min.values /Testing numbers(No.)/Standard deviations(S.Dev)
- Two measuring calibration modes
- With backlight display
- 640 measured values can be stored
- Integrated with printer for convenient use
- Low battery indication
- 2 switch off modes: manual and auto

## Technical Specification

Measuring range	See table in next page
Probe available	
Tolerance	
Minimum resolution	
Measuring condition	
Operation language	English/Chinese
Standards	DIN,ISO,ASTM,BS
Calibration	Zero and foil calibration
Interface	RS232
Statistics	Number of measurement, mean, standard deviation, maximum and minimum
Data memory	640 readings
Limits	Adjustable with alarm
Power supply	NiMH rechargeable battery
Dimensions	230×86×47(mm)
Operating environment	Temperature: 0~40℃ Humidity: 20%~90% No strong magnetic field

## Standard Delivery

● Main unit	1
● Probe	1
● Substrate	1
● Calibration foil	1
● Charger	1
● Print paper	1
● Warranty card	1
● Instruction manual	1
● TIME certificate	1

## Optional Accessory

- Other Probes
- Communication cable

**Optional probe and technical specification**

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 chromeplate 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

**Reference Table for probe selection**

Substrate \ Coatings		Non-magnetism coatings ( organic materials)		Non-magnetism coatings (nonferrous metals)	
		Thickness of coatings is no more than 100 μm	Thickness of coatings is no more than 100 μm	Thickness of coatings is no more than 100 μm	Thickness of coatings is no more than 100 μm
Steel、 iron and other magnetism metal	Diameter of testing area is more than 30mm	F1 probe: 0~1250μm F400probe: 0~400μm	F1 probe: 0~1250μm F10 probe: 0~10mm	F400 probe : 0~400μm F1 probe:0~1250μm	F1 probe: 0~1250μm F10 probe: 0~10mm
	Diameter of testing area is less than 30mm	F400 probe:0~400μm	F1 probe: 0~1250μm F400 probe: 0~400μm	F400 probe: 0~400μm	F400 probe:0~400μm 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 chromeplate on copper)	
Plastic nonmetallic substrate	Diameter of testing area is more than 7mm	-----	-----	CN02 Probe:10~200μm	