



## MCT200 Coating Thickness Gauge



### Overview

MCT200 Coating Thickness Gauge is designed for non-destructive, fast and precise coating thickness measurement and also can measure the film thickness. It is widely used in manufacturing, metal processing industry, chemical industry, commodities inspection and other testing areas. Measuring range from 0 to 10 mm, can meet the different industries in view of the workpiece surface coating thickness testing requirements. It is the necessary professional precision instrument to improve the production efficiency and the qualified rate, saving the cost of production.

## Technical Parameters

Measuring Principle	Magnetic induction & Eddy current. With different external probes, the gauge can be applied to measuring thickness of non-magnetic coating on magnetic Metal substrate, as well as Non-conductive coating on non-magnetic metal substrate
Measuring Range	(0~1250) $\mu\text{m}$ , depends on probes. maximum 10mm for the probe F10
Low Range Resolution	0.1 $\mu\text{m}$
Accuracy	$\pm(3\%\text{Thickness}+1)$ $\mu\text{m}$ , depends on probes and conditions
Display	Digital LCD with EL backlight
Storage	Memory for up to 20 files (up to 50 values for each file) of stored values
Unit System	Metric ( $\mu\text{m}$ )、 Imperial (mil)
Power Source	Two "AA" size, 1.5 Volt alkaline batteries
Working Hours	200 hours typical operating time (EL backlight off)
Communication	USB1.1, can connect to PC
Dimensions	125mmx67mmx31mm
Net Weight	340g

## Features

- Five types of probes are available for different applications, probe contact parts are made up of the hard chrome or red ruby materials, very durable.
- With different external probes, the gauge can be applied to measuring thickness of non-magnetic coating on magnetic metal substrate, as well as non-conductive coating on non-magnetic metal substrate.
- Two calibration methods can be applied to the gauge. The system error of the probe can be corrected with the basic probe calibration method.
- Two measuring modes, single or continuous, changeable.
- Measuring status indicator showing the measuring status.
- EL display back light ensures easy reading of screen data in low light conditions.
- Battery information indicates the rest capacity of the battery.
- Auto sleep and auto power off function to conserve battery life.
- USB1.1 communication port.
- Optional software to process the memory data on the PC.
- Compact aluminum case, suitable for poor working conditions .

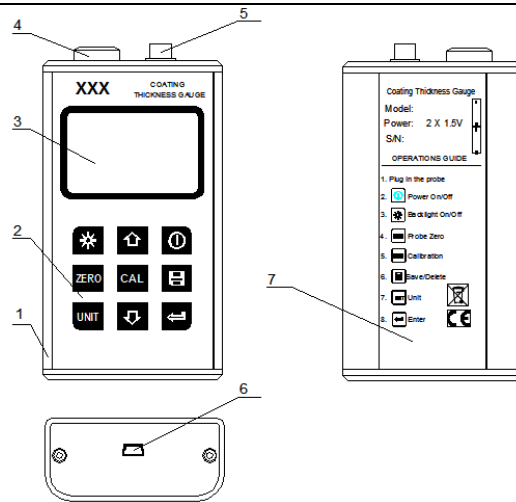
## Structure of The Main Unit

Saver AB  
Gjutegården 161  
S-436 45 ASKIM  
SWEDEN

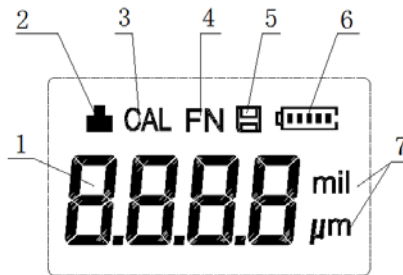


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- ① The main body
- ② Key pad
- ③ LCD
- ④ Battery cover
- ⑤ Probe socket
- ⑥ USB port
- ⑦ Label



## Screen Display



- ① **Information Display:** Display the measured values and user information.
- ② **Measurement Status Indicator:** Indicates the measurement status while the gauge is taking a measurement, the measurement status should be on. If it is not on or not stable, the gauge is having difficulty achieving a stable measurement, and the thickness value displayed will most likely be erroneous.
- ③ **Calibration Status:** Indicates the status of calibration.
- ④ **Probe Type:** Indicates N(Non-ferrous) or F(Ferrous) according to probe type. Probe type is detected automatically while powering up.
- ⑤ **Memory Icon:** Appears during memory operation.
- ⑥ **Battery Status:** Indicates the rest capacity of the battery.
- ⑦ **Unit:** Metric(μm) or Imperial(mil).

## Probe Selection

Probe type	F400	F1/F1(90 )	F10	N1
Principle	Magnetic induction	Magnetic induction	Magnetic induction	Eddy Current

Range( $\mu\text{m}$ )	0~400	0~1250	0~10000	0~1250
Resolution( $\mu\text{m}$ )	0.1	0.1	10	0.1
Accuracy: One-point calibration( $\mu\text{m}$ )	$\pm(3\%H+1)$	$\pm(3\%H+1)$	$\pm(3\%H+10)$	$\pm(3\%H+1.5)$
Accuracy: Two-point calibration( $\mu\text{m}$ )	$\pm[(1\sim3)\%H+0.7]$	$\pm[(1\sim3)\%H+1]$	$\pm[(1\sim3)\%H+10]$	$\pm[(1\sim3)\%H+1.5]$
Conditions: Min curvature of the min Area	Convex>1mm	F1: 1.5; F1/90 Flatten	10	3
Conditions: Diameter of the min area(mm)	$\Phi 3$	$\Phi 7$	$\Phi 40$	$\Phi 5$
Conditions: Critical thickness of substrate(mm)	0.2	0.5	2	0.3

## Configuration

	NO.	Item	QTY	Remarks
Standard Configuration	1	Main Body	1	
	2	Probe F1 or N1	1	
	3	Calibration Foils	5	
	4	Zero Plate	1	Depends on probes
	5	Carrying Case	1	
	6	Operation Manual	1	
	7	Alkaline Battery	2	
Optional Configuration	1	Data-pro Software	1	
	2	USB Cable	1	
	3	Probe F1/90°		
	4	Probe F400		
	5	Probe F10		