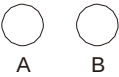


User Manual

V1.5

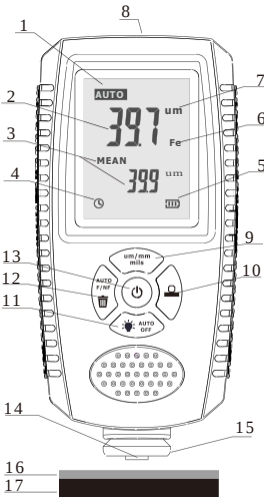
Coating Thickness Gauge

CM-206



1. Introductions

This compact gauge can be used for non-destructive coating thickness measurement of non-magnetic coatings, e.g. paint, enamel, chrome on steel, and insulating coatings, e.g. paint and anodizing coatings on non-ferrous metals.



- 1.Probe mode: AUTO, F, N
- 2.Measuring readings display
- 3.Statistics display
- 4.Auto-power off indication
- 5.Low battery indication
- 6.Substrate(Fe: ferrous; N:non-ferrous)
- 7.Unit(um, mm, mils)
- 8. No USB
- 9. **UP** key(unit switch)
- 10. **RIGHT** key(zero calibration, MEAN MIN/MAX/NO)
- 11. **DOWN** key(backlight on/off, auto-power off enable/disable)
- 12. **LEFT** key(probe mode switch, delete readings)
- 13. **POWER** on/off key
- 14. Probe
- 15. V groove
- 16. Standard foil
- 17. Substrate

2.Replacing the Battery

Place the gauge upside down on a suitable surface, remove the screws from the battery compartment with a crosstip screwdriver, raise the lid of the compartment, remove battery, insert new battery according to the positive and negative poles and close the lid and fasten with screws.

6. Unit

Press the UP key to select the shown unit(Including um,mm and mils) for the readings

7. Probe Mode

Press the LEFT key to select the probe mode(Including AUTO, F and N). In AUTO, the probe can judge measured substrate automatically. In F, the probe can only test on ferrous substrate. In N, the probe can only test on non-ferrous substrate.

8. Statistics View

- a. Press the RIGHT key to switch between mean, maximum, minimum and no. of readings. This model can support up to 50 readings of statistics.
- b. Press and hold the LEFT key for approx. 3 seconds to delete all readings of statistics.

9. Backlight

Press the DOWN key to turn on/off the backlight.

10. Auto Power off

Press and hold the DOWN key for approx. 3 seconds to enable/disable the auto-power-off function. If auto-power-off is enable, the device will power off automatically within 3 min. when there are not any operations.

3. Specifications

Probe	Probe F	Probe N
Measuring principle	Magnetic Induction	Eddy Currents
Measuring range	0 to 1500um	0~1500um
Accuracy	Type A: ±(3%+1um) Type B: ±(2%+1um)	Type A: ±(3%+1um) Type B: ±(2%+1um)
Resolution	0um~99.9um(0.1um) 100um~999um(1um) >1000um(0.01mm)	0um~99.9um(0.1um) 100um~999um(1um) >1000um(0.01mm)
Calibration	zero point calibration	
Statistics	No. of readings, mean, minimum, maximum	
Units	um , mm, mils	
Minimum curvature radius convex	5mm	
Minimum curvature radius concave	25mm	
Minimum measuring area	Diameter 20mm	
Minimum thickness of substrate	0.2mm	0.05mm
Maximum measuring rate	Two readings per second	
Power supply	Two 1.5V AAA battery	
Operation environment	Temperature: 0 to 50°C(32 to 122°F) ; humidity: 20% to 90%rh	
Storage environment	Temperature: -10 to 60°C(14 to 140°F)	
Standard Compliance	CE ROHS FCC	
Size	110mm*53mm*24mm(4.33*2.09*0.94")	
Case Material	ABS : 92g(3.24oz)	

4. Basic Measurement Step

- Step 1. Prepare the sample to be measured.
- Step 2. Press POWER key to power on.
- Step 3. Reference to the chapter 5 if need to calibrate the gauge.
- Step 4. Start measuring. Place the probe on the sample vertically and rapidly, and after one beep, raise the probe rapidly. Readings will be display on LCD, meanwhile statistics value are upgraded and displayed.
- Step 5. Do next measurement according to step 4.
- Step 6. Press POWER key to power off. If not any operations within 3 min., the gauge will power off automatically.

Note: 1. If displayed, the battery is OK. Or if displayed, the battery capacity is low, and measurement will be not reliable, and you need to replace the battery.

5. Zero Calibration

- a. Press and hold "RIGHT Key" until hearing "beep...beep beep...". The LCD will flash "ZERO" symbol.
- b. Place the probe on uncoated sample and raise it after one beep.
- c. Repeat step b and c several times to obtain mean value.
- d. Finished. Press "RIGHT Key" to exit calibration mode.

11. Trouble Shooting

If the instrument is no response and can't be turned on, you can remove the battery, and a few minutes later, reinstall the battery, and try again. If the problem persists, please contact with your supplier for help.

The following errors can be remedied by system reset:

- Illogical readings
- Several of the keys don't work

Reset to factory settings:

- 1. Power off the gauge.
- 2. Press and hold "POWER Key" until "RS" shown on the LCD.

Tips:

During the measurement, if the value of "OL" appears on the device display, and testing can't restore normal, Please do the following:

With the device turned off, press and hold the power button until the "RS" symbol appears on the display. After that, calibrate the thickness gauge according to part 5 "Zero Calibration".

If you have any questions regarding our equipment, our email address is: info@VVV-Group.com