

Standard Operating Procedure
Instrument: Coating Thickness Gauge
Model: EC900

1. Button Guide:



2. Zero Calibration:

To perform zero calibration for both ferrous and non-ferrous substrates, the procedure is the same and is as follows

- a) To enter the zero calibration mode, press and hold the ZERO button.
- b) Once the mode is entered, the text 'Zero' will appear and blink periodically on the bottom of the screen.
- c) Place the probe on the Fe/Al zero plate or on your uncoated sample.
- d) Ensure that the value displayed on the screen is 0.0.
- e) Repeat the same process 5 times by placing the probe on different locations of the zero plate.
- f) To exit the zero calibration mode, press the ZERO button.

3. Multi-point Calibration:

To perform multi-point calibration for both ferrous and non-ferrous substrates, the procedure is the same and is as follows

- a) To enter the multi-point calibration mode, press the CAL button.
- b) Ensure that no readings are displayed on the screen beneath the text 'Calibration'.
- c) If readings are displayed on the screen, refer to section 4.
- d) Select a foil of suitable thickness based on your application and place it on the Fe/Al zero plate. The general recommendation is to select a foil of thickness closest to your coating thickness. For example, if you want to measure a coating of 60µm, select the 49µm foil for calibration.
- e) Place the probe on top of the foil and check the value displayed on the screen.
- f) If the value is higher than the foil thickness, press the DOWN button till the value comes to the same number as the foil thickness.
- g) If the value is lower than the foil thickness, press the UP button till the value comes to the same number as the foil thickness.

- h) Press the ENT button to save the value.
- i) Repeat steps 3e to 3h by placing the probe on another location. This can be done on up to 4 different locations.
- j) To exit the multi-point calibration mode, press the CAL button.

4. Clearing Calibration Values:

To clear calibration values

- a) Press the ENT button to enter the menu.
- b) Go to Calibration > Clear All > OK.
- c) Press the BACK button till the measurement screen appears again.

5. Measurement:

To measure the coating thickness of a sample

- a) Switch on the instrument by pressing the PWR button.
- b) Place the probe on the sample surface and apply even pressure.
- c) Ensure that the probe head is seated evenly on the surface.
- d) The thickness in μm gets displayed on the screen instantly.

