Using the Zero Calibration feature of the Elcometer 456 Coating Thickness Gauge

When using the Elcometer 456 Dry Film Thickness Gauge to measure the thickness of a coating on smooth substrates, a quick and simple method of calibrating the gauge is the Zero, or single-point calibration method.

To undertake a Zero calibration, you will need:

- An Elcometer 456 DFT gauge, and a probe if using a separate gauge.
- And ideally, an uncoated sample of the substrate you will be measuring on. An uncoated sample will always result in a more accurate calibration, and should be done whenever possible. However, if one is not available, a smooth Elcometer zero plate - either ferrous or non-ferrous depending on your sample’s material - can be used. Don’t forget, if you are working on both ferrous and non-ferrous materials, then you should calibrate on samples of both.

The Elcometer 456 is an intelligent gauge, so, once the gauge has been set to the Zero Calibration Method, it will guide you through the calibration process, one step at a time.

To select the Zero Calibration Method, press the “Cal” softkey. Highlight “Cal Method” using the up and down softkeys, and press the “Select” softkey. Then highlight and select “Zero”, followed by the Back softkey. The Zero Calibration Icon will now be displayed next to the “Cal Method” menu item.

To calibrate the Elcometer 456, simply select the “calibrate” menu item and follow the on screen prompts.

The Elcometer 456 will ask you to place the probe onto the uncoated substrate or zero plate. Hold the probe like a pen, and place down evenly, at a 90 degree angle to the surface. The Elcometer 456 will adjust the calibration automatically, and you are ready to start measuring.

For a more accurate method of calibrating the Elcometer 456 on smooth substrates, you can always select the smooth calibration method. Click on the link on-screen, to see how it's done.

Or, for more information and training on the Elcometer 456 Coating Thickness Gauge, click on one of the links on-screen, or visit elcometer.com; and please don’t forget to subscribe to the Elcometer Channel to be notified of any new videos.