How to take accurate DFT measurements on concrete with the Elcometer 500 Coating Thickness Gauge

The Elcometer 500 Coating Thickness Gauge incorporates state of the art electronics and measurement technology to accurately and reliably measure up to 9mm (355mils) of coatings on concrete, or other similar substrates.

Whilst coating thickness gauges designed for use on metal substrates can be placed down and will instantly provide a reading, concrete coating thickness gauges work in a slightly different way.

Typically, they use an ultrasonic sound pulse to determine the thickness of the coating. Sometimes the ultrasonic signal can be deflected or weakened by the substrate material or coating, so you won’t always get a reading instantly.

As a result you may have to move the probe around to obtain a reading, ensuring you have an adequate amount of ultrasonic couplant on the surface wherever you’re placing the probe. This is perfectly normal when using an ultrasonic gauge or when measuring coatings on concrete or other similar substrates.

And unlike other concrete coating thickness gauges, which produce a reading regardless of how strong or reliable the signal is, the Elcometer 500 avoids false or incorrect readings by only displaying a valid coating thickness if the signal strength indicator is in the green.

The gauge determines this by taking and analysing over 100 measurements, all in under a second, before deciding if the signal is stable, and presenting a valid reading on the screen – giving you confidence in the results.

For more information on the Elcometer 500 Coating Thickness Gauge, or to watch one of our other Elcometer 500 videos, click the pop-out in the top right of the screen, or simply visit Elcometer.com/e500.

And don’t forget to subscribe to the Elcometer Channel to be notified of any new videos.