Wall Thickness

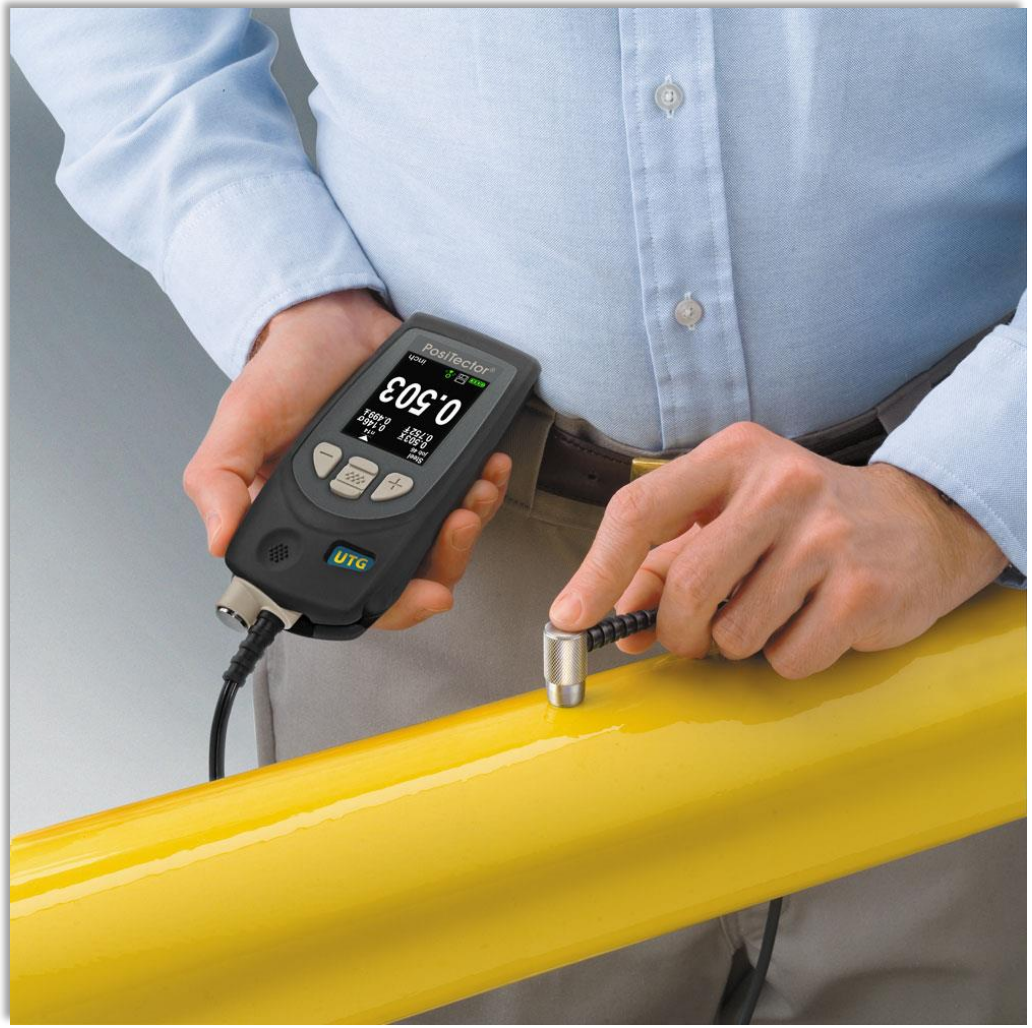
PosiTector UTG

EMIN
Testing & Measuring Everything

DeFelsko®
The Measure of Quality

Why Measure Wall Thickness?

EMIN
Testing & Measuring Everything



It is often critical to measure the effects of corrosion or erosion on tanks, pipes or any structure where access is limited to one side

DeFelsko®
The Measure of Quality

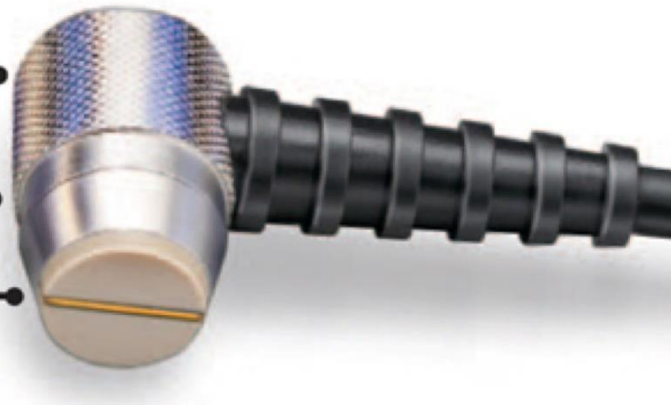
Models

PosiTector UTG Models available

- UTG *C*-Measures the wall thickness such as steel, plastic, and more
- *UTG CX*-Same capabilities as UTG-C but with a braided stainless steel cable
- *UTG M*-Features Thru-Paint capability to quickly and accurately measure the metal thickness of a painted structure without removing the paint
  - Also ideal for applications that require a more durable wear face

UTG C Probe

- Stainless steel probe with knurled fingergrip
- Automatic V-Path compensation for thin materials
- 5 MHz dual element transducer



UTG M Probe

- User selectable **Single Echo** and **Multiple Echo** techniques
- Stainless steel probe with knurled fingergrip
- 5 MHz contact probe with wear resistant Alumina probe tip

PosiTector *UTG CX*

EMIN
Testing & Measuring Everything

Xtreme Corrosion Probe

Braided Stainless Steel Cable for Demanding Applications

- Same accuracy and ease-of-use as PosiTector UTG C Probe

DeFelsko®
The Measure of Quality

PosiTector *UTG CA*

EMIN
Testing & Measuring Everything

NEW

Integral Probe

Ideal for one-handed operation.

- Same accuracy and ease-of-use as PosiTector UTG C Probe with the additional benefit of a one-handed device.

PosiTector *UTG CLF*

EMIN
Testing & Measuring Everything

NEW

Low Frequency Probe

Designed for measuring attenuative materials such as cast iron

- Proprietary algorithm distinguishes back wall reflections from grain noise (reflections) found in cast materials

PosiTector *UTG P*

EMIN
Testing & Measuring Everything

NEW

Precision Probe

Designed for high resolution measurements and thin materials

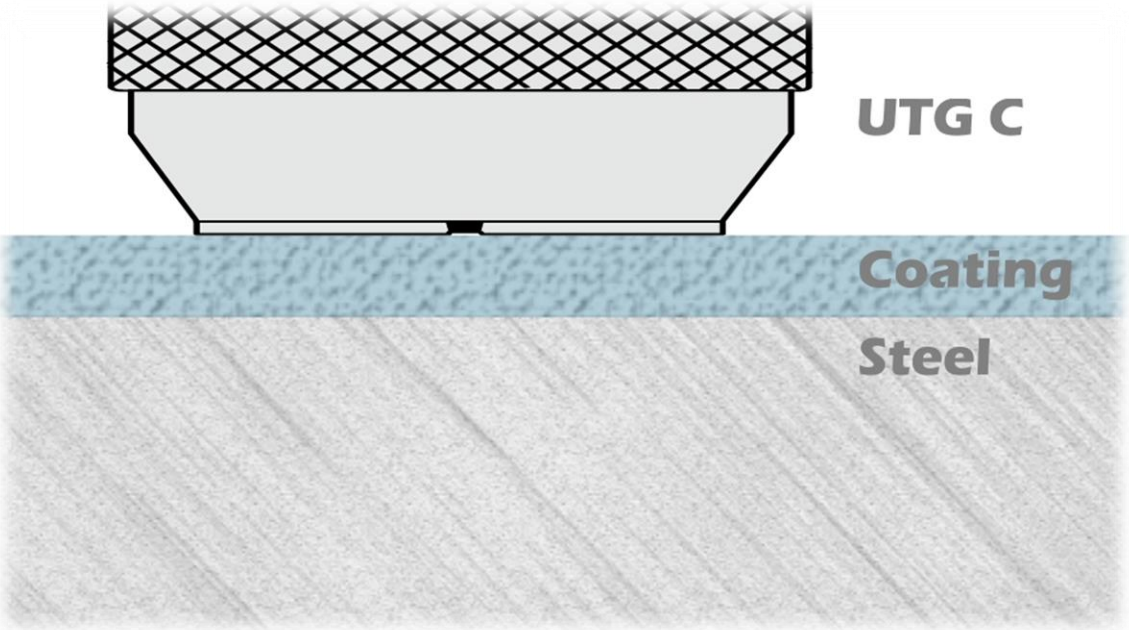
- Automatic Multi-Echo mode ensures the best accuracy on thin metals.
- Ideal for thru-paint applications to quickly and accurately measure the metal thickness of a painted structure without having to remove the coating

Technical Note: Influence of Coatings

EMIN
Testing & Measuring Everything

When using the *UTG C* or *UTG M* in Single Echo mode, it is important to remove the coating prior to measurement

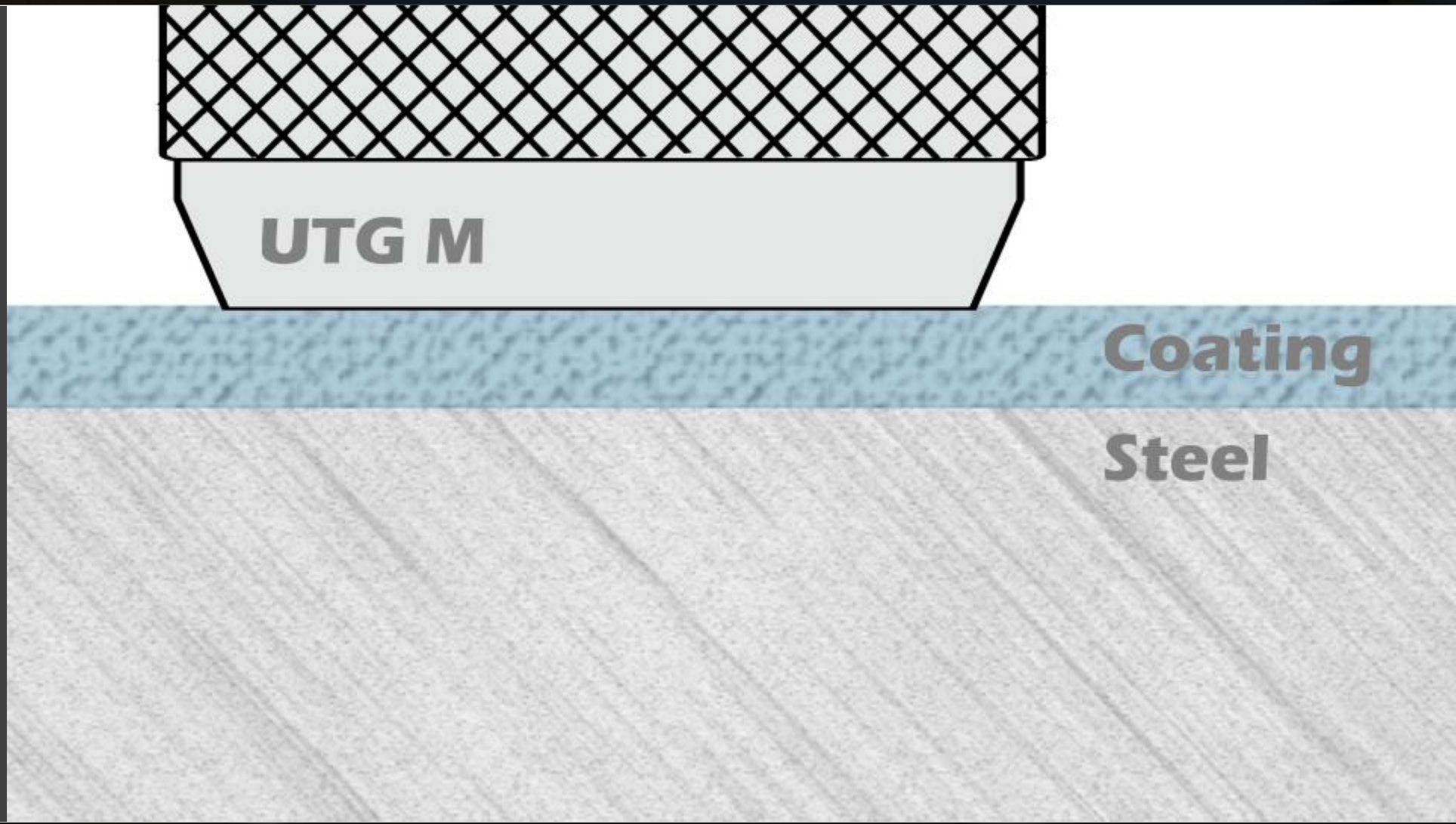
- Compared to metal, polymer coatings have a much slower acoustic velocity- disproportionately affecting the reading



Technical Note: Influence of Coatings

EMIN
Testing & Measuring Everything

The *UTG M* and *UTG P* listen for multiple echoes. The distance between subsequent echoes is not affected by the coating



PosiTector *UTG* Ordering Guide

EMIN
Testing & Measuring Everything

Ultrasonic Wall Thickness Probes								
Application	**Corrosion**		**Corrosion Xtreme**	**Low Frequency**	**Multiple Echo**		**Precision**	
Model	UTG C	NEW UTG CA	UTG CX	NEW UTG CLF	UTG M		NEW UTG P	
Probe Type	5 MHz Dual Element			2.25 MHz Dual Element	5 MHz Contact		15 MHz Single Element Delay Line	
Mode	Single Echo				Single Echo	Multiple Echo	Steel	Plastic
Measurement Range*	0.040" to 5.000" 1.00 to 125.00 mm				0.100" to 5.000" 2.50 to 125.00 mm	0.100" to 2.500" 2.50 to 60.00 mm	0.008" to 0.475" 0.2 to 12.0 mm	0.005" to 0.175" 0.125 to 4.500 mm
Thru-Paint Capability	No				Yes			
Resolution	0.001" 0.01 mm				0.001" 0.01 mm		0.0001" 0.002 mm	
Accuracy	± 0.001" ± 0.03 mm				± 0.001" ± 0.03 mm		± 0.0004" ± 0.01 mm	

** Measurement range is for carbon steel and depends upon surface condition, temperature and material.*

Competitive Advantages

EMIN
Testing & Measuring Everything

- High Quality transducers manufactured by DeFelsko in the USA, at a much lower cost than competitors
- Min Scan mode- measure over 20 readings/sec with onscreen min/max
  - ✓ Smart Couple™- eliminates unintentional decoupling- stops recording measurements when probe isn't coupled
- A-Scan and B-Scan for advanced analysis (Advanced models only)

PosiTector platform	Included Certificate of Calibration Traceable to NIST	Full two year warranty on body **and probe**	DeFelsko service- quick shipping, recalibration, and repair
• Fully interchangeable probes • Often, competitive 'interchangeable' probes require specific body models • Free software, and USB, WiFi, and Bluetooth	• More than a 'Certificate of Accuracy'- contains measurements from the probe on traceable standards • An extra charge (and delay) from most competitors	• Many competitors offer a much shorter warranty on the probe- the most important part	

DeFelsko®
The Measure of Quality