

TI-CMX

Ultrasonic Coating & Wall Thickness Gauge

The new CHECKLINE® TI-CMX measures both coating and wall thickness quickly and accurately—from only one side.

In addition, when switched to Pulse-Echo mode, the TI-CMX automatically measures and eliminates the coating from the wall thickness measurement, enabling the user to locate the finest corrosion and pitting—without removing the coating.

Oversized graphic LCD is backlit and features easy to read fonts, graphics and display codes showing all critical settings including Velocity, Operating Mode, Alarms, Scan Mode and more.

Five user-selected operating modes are included:

Coating On

Measures wall thickness using Pulse-Echo. It separately displays wall & coating thickness.

Coating Off

Measures wall thickness using Pulse-Echo. It displays wall thickness only.

Temperature Compensated

Measures wall thickness using Pulse-Echo and automatically adjusts calibration to compensate for changes in material temperature

Thru-Coat

Measures wall thickness only using Echo-Echo. (coating is NOT included)

Coating Only

Measures coating thickness only.



Features

- Auto probe recognition with Auto Zero or Manual Zero.
- Wide variety of dual-element probes can be used for nearly any application.
- Bar graph with user-set start end values providing highest resolution around the target thickness value.
- Differential Mode allows user to set a "target thickness value" and display will show the DIFFERENCE between actual and target thickness as a plus or minus value.
- Adjustable Gain in 5 steps (VLow, Low, Med, Hi & VHi) in 2db increments providing a 8 db gain adjust range (42–50 db).
- 64 custom setups can be stored and retrieved for convenient use and labeled for easy identification.
- Display Hi/Lo Alarm Limits with audible and visual indicators.
- CE Certified.
- Includes NIST-Traceable Calibration.
- 2-Year Warranty.
- Metal housing provides strong protection against harsh environments.

TI-CMX automatically measures and eliminates the coating from wall thickness measurements, allowing users to locate the finest corrosion and pitting

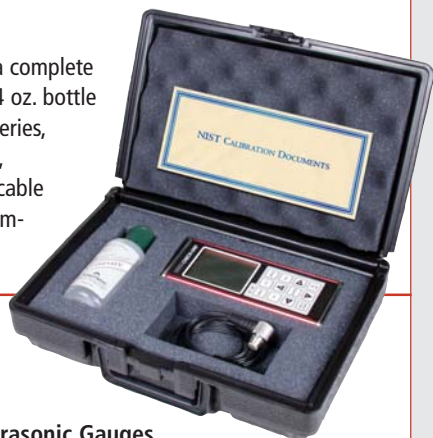
Specifications

Bulletin #UT-705

Range in Steel	Pulse-Echo Mode: Pit and Flaw detection measures from 0.025–9.999 inches (0.63 to 254mm)	Memory Capacity	TI-CMX: none TI-CMXDL: over 200,000 measurements
Echo-Echo Mode	Thru Paint & coatings measures from 0.100 - 4.000 inches (2.54 to 102mm) Range will vary depending on the thickness of the coating.	Power Source	Three 1.5V alkaline or 1.2V NiCad AA cells
Resolution	.001 inches (0.01mm)	Battery Life	Typically operates for 150 hours on alkaline and 100 hours on NiCad
Velocity Range	.0492 to .3936 in/μsec 1250 to 9999 meters/sec	Auto Power Off	After 5 minutes of non-use
Units	Inch or mm	Display	1/8 in. VGA grayscale display 62 x 45.7mm
Measurement Modes	Pulse-Echo (corrosion mode) Pulse-Echo Coating (Corrosion w/o coating) Echo-Echo (thru-paint) Temp Comp (auto adjust for material temp) Coating Only (Ultrasonic Coating Gauge)	Keyboard	Membrane switch with twelve tactile keys
Transducer Types	Dual Element (1 to 10 MHz).	Case	Extruded aluminum body with nickel-plated aluminum end caps (gasket sealed).
Output	RS-232 for upload/download of setups	Operating Temperature	–14° to 140°F (–10° to 60°C)
		Weight, net	383 grams
		Dimension	63.5 W x 165 H x 31.5 D mm
		Warranty	2 year limited
		Certification	CE Approved, Factory calibration traceable to national standards

Complete Kit

The TI-CMX is supplied as a complete kit with the gauge, probe, 4 oz. bottle of coupling fluid, 2 AA batteries, NIST Calibration Certificate, operating manual, RS-232 cable and software—all in a foam-fitted carrying case.



Options & Accessories

Protective Holder for Ultrasonic Gauges

- Constructed from heavy duty Cordura Nylon
- Includes wrist & shoulder straps

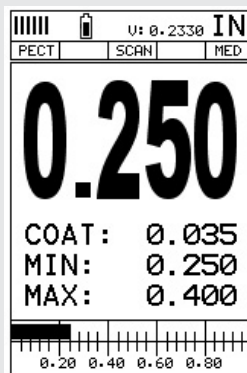
Steel Test Block

- 3 Sizes Available
- Precision Machined and Finished
- Includes NIST Report and Test Data

Coupling Fluid

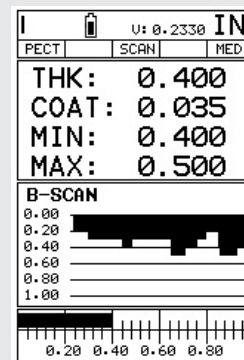
- Used to create an ultrasonic coupling between the probe and material to be measured

Hi-Speed Scan Mode



Scan Mode measures 64 times per second, displaying the max and min reading measured during the scan interval. Sample rate is 200/sec when coating measurement is off.

B-Scan Mode



The B-Scan displays a time based cross section view of test material of the contour of the blind, or underside of a pipe or tank application. the B-Scan view draws at a rate of seven seconds per screen from right to left.