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# **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.

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.

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.

# ULTRASONIC COATING & WALL THICKNESS GAUGE O.750 COAT: 0.035 MENU CLR MEAS OK A BSC WENU CLR MEAS OK A BSC OK A BSC CHECK-LINE

# **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**

Range in Steel Pulse-Echo Mode: Pit and Flaw detection

measures from 0.025-9.999 inches

(0.63 to 254mm)

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.

Resolution .001 inches (0.01mm)

Velocity Range .0492 to .3936 in/µsec 1250 to 9999 meters/sec

Units Inch or mm

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)

Transducer Types Dual Element (1 to 10 MHz).

Output RS-232 for upload/download of setups

Memory Capacity CMX: none

CMXDL: over 200,000 measurements

Power Source Three 1.5V alkaline or 1.2V NiCad AA cells

Battery Life Typically operates for 150 hours on alkaline

and 100 hours on NiCad

Auto Power Off After 5 minutes of non-use

Display 1/8 in. VGA grayscale display 62 x 45.7mm

Keyboard Membrane switch with twelve tactile keys

Case Extruded aluminum body with nickel-plated

aluminum end caps (gasket sealed).

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

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 data transfer software —all in a foam-fitted carrying case.



# Protective Holder for Ultrasonic Gauges

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

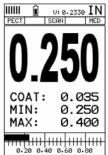
# Steel Test Block

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

# **Coupling Fluid**

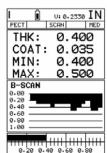
 Used to create an ultrasonic coupling between the probe and material tobe measured

# 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.