Precision Quality Control Instruments Since 1958

CHECKLINE
MADE TO MEASURE

TI-25MXT
Thru-Paint Ultrasonic Wall Thickness Gauge

Measures wall thickness & extent of corrosion — *from only one side*

Features

Total Measuring Range

Pulse-Echo (PE) Mode *(Pit & Flaw Detection)*
0.025 to 36.000 inches (0.63 to 914.4mm)

Echo-Echo (EE) Mode* *(Thru Paint & Coatings)*
0.100 to 1.000 inch (2.54 to 25.40mm)

Measuring Range on Steel

Pulse-Echo (PE) Mode *(Pit & Flaw Detection)*
0.040 to 8.00 inches (1.00 to 199.9mm)

Echo-Echo (EE) Mode *(Thru Paint & Coatings)*
0.100 to 1.000 inch (2.54 to 25.40mm)

- **Standard probe:** The gauge reads thru a 0.040" *(1mm)* thick coating **Optional probe:** The gauge reads thru a 0.075" *(1.9mm)* thick coating
- Resolution of 0.001 inch (0.01 mm)
- Switch-selected units (inches or mm)
- 2-point calibration optimizes linearity over a wide measurement range
- Scan mode (100 readings/sec.) displays minimum thickness during the "scan"
- 5-step GAIN adjustment for optimal accuracy in challenging applications
- The extruded aluminum housing is impact-resistant and environmentally sealed (IP 65)
- LCD Display shows thickness value, velocity setting, gain setting, stability & battery indicators, scan mode, zero and units
- Two (2) AA Batteries provide 45 hours of continuous operation
- Selectable Backlight ON/OFF/AUTO

* Acutal range depends upon probe selected. Six (6) probes are available

The CHECK-LINE TI-25MXT Wall Thickness Gauge accurately measures wall thickness and extent of corrosion of all metals, ceramics, glass and most rigid plastics—*from only one side!* When operated in E-E Mode (Thru-Paint Mode), the coating is eliminated from the reading. The gauge displays only the thickness of the metal wall.

TI-25MXT Features include Automatic or Manual Probe Zero maximizing accuracy, 5-position Gain Adjustment to help locate the correct backwall echo and to penetrate the walls on sound-attenuating materials such as cast metals and thick materials.

It also features Differential mode, Hi-Low Alarms with audible and visual indicators and Scan mode that captures the minimum thickness at 100 measurements per second (100 Hz). It also includes a special Velocity Mode to measure in terms of velocity for nodularity testing.

The calibration and other setup parameters can be locked to prevent any accidental adjustments.

5-year warranty, CE-certified, Made in USA, includes NIST-traceable calibration certificate

Complete Kiti includes: TI-25MX gauge, probe, 4 oz. bottle of coupling fluid, 2 AA batteries, NIST-traceable calibration certificate and operating instruction manual—all in a foam-fitted carrying case.

CHECKLINE
MADE TO MEASURE

Checkline • 600 Oakland Ave, Cedarhurst NY 11516 - USA
www.Checkline.com • info@checkline.com • 516-295-4300

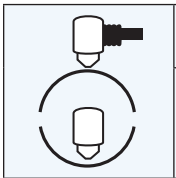
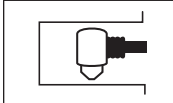
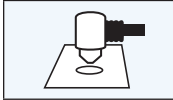
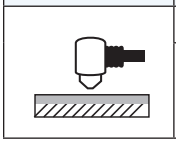
Specifications

Range in Steel	Pulse-Echo Mode (Pit & Flaw Detection) measures from 0.025 to 19.999" (0.63 to 500mm) Echo-Echo Mode (Through Paint & Coatings) measures from 0.100 to 1.000" *(2.54 to 25.40 mm)* range depends upon probe selected)—six probes available
Resolution	0.001" *(0.01mm)*
Velocity Range	0.0120 to .7300 in/µs. 305 to 18,542 meters/sec
Probe (Standard)	1/4", 5 MHz Hi-Damp Dual Element Transducer, actual wearface is 5/8" (17mm), p/n T-102-2700
Probes (optional)	1 to 10 MHz, 3/16" up to 1 inch (custom probes available)
Probe Wearface	PEEK (Polyethylethylkytone)
Cable	4 ft.*(1.2m)* waterproof cable with non-polarized, quick-disconnect connectors
LCD Display	Multi-function 7 segment 4.5 digit liquid crystal display with 0.500" digit height. Two 0.125 in14 segment fields for labels and values, and one 7 segment field for labels and values. Additional icons to indicate features and modes
Display Backlight	Backlight is selectable on/off/auto, and selectable brightness (Lo, Med, Hi) options
Display Update Rate	10 Hz (10 updates/sec)
Temp. Limits	Ambient: –22 to 167° F (–30 to 75° C) Material: 0 to 200° F (–20 to 100° C) High temperature probes available

Battery Type	2x AA batteries (rechargeable batteries can be used)
Battery Life	45 hours continuous use
Weight	11 oz. *(308g)*
Dimensions	2.5" x 5.17" x 1.25" *(63.5 x 131.3 x 31.5mm)*
Accessories	Probe/cable assembly, 4 oz. bottle of coupling fluid, NIST Calibration Certificate, 2 AA batteries, operating instructions, hard-plastic carrying case.
Housing	Extruded aluminum body with nickel-plated aluminum end caps (gasket sealed)
Housing Rating	IP65
Certifications	NIST Traceable and MIL-STD-45662A
Keypad	Sealed membrane resists to water and petroleum products. Seven or eight tactile-feedback keys
Pulse Repetition Frequency (PRF)	200 Hz (200 pulses/sec)
GAIN Adjustment	Adjustable GAIN 5-position (VLOW, LOW, MED, HIGH, VHI), in 3dB steps, 40-52dB
Time Dependent Gain (TDG)	Used inpulse-echo (P-E) and Echo-Echo (E-E) modes depending on transducer and frequency selected
Measuring Mode	Pulse-Echo (P-E), Echo-Echo (E-E, Thru-Paint Mode), Scan, Differential, Alarm and VX-velocity
Pulser	150 volt square wave pulser
Warranty	*Gauge:* 5 Years *Probes:* 90 Days

MADE IN THE USA

Measuring Limits

	Minimum Radius for Convex Surfaces	0.350" *(8.89mm)*
	Minimum Radius for Concave Surfaces	3" *(76.2mm)*
	Minimum Headroom	1" *(25.0mm)*
	Minimum Sample Diameter	0.150" *(3.8mm)*
	Minimum Substrate Thickness - F	na
	Minimum Substrate Thickness - NFe	na

Related Products

SB-Series **Certified Steel Test Blocks**	• Precision Machined and Finished • Includes Wooden Storage Box • Includes NIST Traceable Calibration Certificate
TICC-M **Protective Holder for Ultrasonic Gauges**	• Constructed from heavy-duty Cordura Nylon • Built-in belt loop
V-Block **Ultrasonic Transducer Holder**	• For 3/16" & 1/4" Transducers only
SB Step Block **Steel Test Blocks without certification**	• Fabricated from 1018 Steel • Supplied without certification
CF-12 **Coupling Fluid**	• Temp Range: 0 - 200 °F, -18 - 93 °C
A-302-6002 **Protective Rubber Boot for TI / ZX Series Small Body Ultrasonic Thickness Gauges**	• Built-in Stand • Hand and shoulder straps

CHECKLINE®
MADE TO MEASURE

Checkline • 600 Oakland Ave, Cedarhurst NY 11516 - USA
www.Checkline.com • info@checkline.com • 516-295-4300