An Overview of Ultrasonic Thickness Gauges

Ultrasonic Thickness Gauges are useful and productive tools designed to improve safety and ensure reliability of equipment and material subject to corrosion or erosion.

Corrosion gauges of the DM family with their dual element transducers are the primary inspection tool used to measure the remaining walls of components like pipelines, pressure vessels, storage tanks, etc.

Precision gauges of the CL family use single element transducers to provide the thinnest range and highest degree of accuracy possible. Common applications include not only metals but a variety of non-metals as well, e.g. glass, ceramic, plastic, etc.

Because of the variety of our instruments and probes we are able to offer the best solution for your specific application.

The CL 400 is a highly capable precision thickness gauge. It combines extraordinary ultrasonic performance with field-orientated functions and intuitive operation.

- Advanced signal processing, broad receiver bandwidth and a large assortment of highly damped single element transducers provide high accuracy and resolution.
- High-contrast display screens with large and easy-to-read digits
- A-Scan option verifies measurement accuracy and aids in probe alignment for critical inspections. In addition instrument parameters can be adjusted to optimize performance for special probes or demanding applications.
- Data Recorder option offering flexible and customized data management

Most important for obtaining optimized results on your test application is the selection of the best-suited probe for this specific task. Factors like material, geometry, thickness, accuracy, surface structure and temperature have to be considered.

We are able to offer probes for:
- Standard applications
- Thin wall thicknesses
- Heavy or thick wall components
- Complicated geometries
- Precision Thickness measurements
- Materials with high sound attenuation
- Components with elevated temperatures
Special application probes available upon request.

GE Inspection Technologies

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PocketMIKE
Integrated, general purpose thickness gauge

The PocketMIKE’s integrated product design combines the instrument and transducer into a single package allowing for true single hand operation and providing a very capable yet simple to use device.

- Integrated, exchangeable probe with 5 MHz frequency for all standard applications
- A measuring range in steel of 1.0 to 250 mm for thin metal sheets and bulky parts
- -10 °C to +50 °C operating temperature
- High contrast backlight display can be electronically and mechanically rotated for ease of reading in any orientation
- Machined stainless steel housing environmentally sealed to IP 67 for measurement under rough conditions
- Weighs only 150 grams

DM 4 Family
Handy, rugged, efficient ultrasonic thickness gauge

The DM 4 instrument family enables you to accomplish a large number of demanding tasks, especially with remaining wall thickness measurements on components subjected to corrosion and erosion.

Different models are available, the DM 4DL offers:
- Large selection of probe designs tailored for the DM 4 gauges, e.g. dialog or high-temps
- Field-proven features like Minimum Capture Mode, Differential Mode and 2-Point Calibration are making your work easier
- Dual-Multi Measurement Mode: Use for measuring coated equipment and ignoring the coating (paint, plastics, etc.) and display only the base material thickness.
- Automatic probe zeroing for optimized gauge setting to a large number of probes and test conditions
- Data logger for storing thickness data for later download to software for viewing, printing reports and digitally storing data

DMS 2 Family
Documented corrosion testing with A-Scan and B-Scan

The DMS 2 is the right solution for demanding inspection problems dealing with corrosion inspection. The programmable data recorder can be configured from the PC and has the ability to store masses of thickness data for downloading to a computer for storage and analysis.

The DMS 2TC version offers:
- The patented TopCOAT technology for superior measurement on coated equipment. Simultaneously displays both the coating thickness and base material thickness.
- Auto-V Mode enables automatic measurement of the sound velocity of different (uncoated) materials without any additional calibration.
- Large A-Scan display for signal measurement verification and adjustment
- Solve a large variety of applications with the most versatile probe selection available