

Ultrasonic Thickness Gage Evolution Over The Last 4 Decades

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Over the last four decades, ultrasonic thickness gages have gone through an incredible journey, not only in hardware, but also measurement features. From analog to highly intelligent digital gages, the transformation has been amazing. As many technicians can attest, their applications change all the time and equipment must change with them. The ultrasonic thickness gage is still the most widely used piece of ultrasonic equipment today and will continue well into the future. This presentation will show many of the changes that were needed as the industry demanded more capability and application solutions. You will see the changes in the packaging hardware and also software features that were added to meet the needs of the industry. Throughout this presentation, you will see many of the first examples of technology that at first were called useless and gimmick, but today are the standards that all thickness gauges must have. Features such as live A-scan and data logging, which 4 decades ago were non-existent, are available on almost every manufacture's gauges. NDT 4.0 has had an impact also with the addition of Bluetooth and Wi-Fi for communication. Dataloggers have also increased with the help of SD card storage, giving the user almost unlimited storage capability of data. The size of these gauges has changed also, starting with very large packages, then reduced to very small handhelds, to now a package that can help the technician accomplish their many tasks, including above ground and rope-access inspections, with simply one-hand operation.