



## ULTRASONIC THICKNESS METERS

The Ultrasonic Measuring Technique is used to measure the thickness of steel and all other metals, glass and homogenous plastics and to detect material flaws, corrosion and pits.

The main advantage of ultrasonic measurement over traditional methods is that ultrasonic

measurement can be performed with access to only one side of the material being measured.

The ultrasonic gauges are used in the automotive, aircraft, machine and tool industry and especially to check the residual thickness of tanks and tubes.



### SERIES MX

measure the thickness of materials from 1 mm and detect material flaws :

The devices MX-2, MX-3 and MX-5DL work with dual-element (transmit and receive) transducers, which not only measure the thickness of materials from 1 mm (steel) but are as well suitable to detect material flaws (corrosion and pits). A wide selection of dual-element transducers for any material and different applications are available.

**MX-2** is a fixed velocity gauge that requires no special training to operate. It contains eight velocities of common materials and 2 velocities that the user can set using a simple software program. In addition this software program enables the operator to change the fixed velocities.

**MX-5DL** additionally has an automatic Data Logging System with 1000 reading capacity (10 files of 100 readings) and a serial interface RS 232 for data transfer and evaluation on a computer. An ALARM and DIFFERENTIAL mode is also included.

**MX-3** and **MX-5DL** have the ability to calibrate to a variety of different materials using a one or two point calibration option. This is very important when high accuracy of measurement is requested.

### SERIES PX

measure extremely thin materials from 0,15 mm also on painted and coated materials :

**PX-7DL** is a special device to measure thin materials with high accuracy. It can not be used to detect material flaws and pits. The device works with single-element transducers (15 MHz and 20 MHz) and includes three measuring modes :

In the echo-echo mode it measures the thickness of very thin materials down to 0.15 mm without removing the paint or coating.

The interface-echo mode is used when measuring thicker materials and plastics.

The auto-switchable mode selects automatically the mode corresponding to the material to be measured.





The human eye – symbol of our job:  
 Guaranteeing quality through surveillance. Perfect  
 in function and technology. Open to everything new,  
 recognizing changes in due time and responding to  
 them shrewdly. Success is visible.



**NEW !**



### SERIES MMX

**measure the thickness from 1 mm, detect material flaws and measure through the coating. All these features combined in one device !**

The new series **MMX-6** and **MMX-6DL** combine all the features of the MX series with the multi-mode feature for reading through and eliminating the thickness of painted or coated materials.

All these features are available with only one high damped dual-element transducer. With the DUAL-MULTI key conveniently toggle between pulse-echo mode (detect flaws and pits) and echo-echo mode (eliminate paint and coating thickness).

Obvious to mention that all standard dual-element transducers can be used to measure uncoated materials.

**MMX-6** is the standard model with SCAN and ALARM facility, but without data logger system.

**MMX-6DL** includes a data logging system with 1000 reading capacity (10 files of 100 readings) and a serial interface RS 232.

General Technical Data	
Resolution:	0.01 mm
Velocity Range:	1.250 – 10.000 m/sec
Power Supply:	2 x 1.5V battery (Mignon) (130 hours operating time)
Display:	4.5 digit LCD, backlit
Temperature Range:	-30° to 50° C
Size:	63.5 x 114.3 x 31.5 mm
Weight:	295 g
Warranty:	5 years

Special Features	MX-2	MX-3	MX-5DL	PX-7DL	MMX-6	MMX-6DL
Measuring Range in steel (depending on material and transducer)	1 – 500 mm	1 – 500 mm	1 – 500 mm	0.15 – 25 mm	1 – 500 mm	1 – 500 mm
Single and two point calibration	--	X	X	X	X	X
Data Logging System	--	--	X	X	--	X
ALARM Mode	--	--	X	X	X	X
SCAN Mode	--	X	X	X	X	X
Interface RS 232	--	--	X	X	X	X
Echo-echo Mode	--	--	--	X	X	X
Pulse-echo Mode	X	X	X	X	X	X
Dual-element Transducers	X	X	X	--	X	X
Single-element Transducers	--	--	--	X	--	--
High-damped Transducers	--	--	--	--	X	X

**Certified according to EN ISO 9001**