

## MX Series

### Fixed Velocity Thickness Gauges



The **MX-1** and **MX-2** are fixed velocity gauges making them affordable precision tools that require no special training to operate.

The **MX-1** will hold a single velocity, making it the perfect choice where one material is being tested day after day. With the preset velocity in the gauge, you simply turn on the gauge and you are ready to work. The velocity is set in the **MX-1** with a simple software program that is supplied with the unit.

The **MX-2** is ideal for the person that tests a few different materials regularly. The **MX-2** contains 8 velocities of common materials and 2 velocities that the user can set using a simple software program.

The **MX-1** and **MX-2** are packaged in all metal cases, sealed with gaskets to protect them from harsh working environments. These gauges can go where you go, to do the work you do, saving you time and money, making fast accurate measurements.

Dakota Ultrasonics offers quality gauges that are reliable, innovative and competitively priced - all backed by the longest warranty in the business—5 full years.

# MX-1 & MX-2 THICKNESS GAUGES

**DAKOTA ULTRASONICS** rugged thickness gauge family has been designed and built to satisfy the roughest industry conditions. The features offered in the **MX Series** allow the user to select a quality tool that will meet or exceed their specific application needs. Our 5 year limited warranty indicates how we feel about the reliability and durability of the **MX Series**.

## SPECIFICATIONS

### Physical

**Weight:**

10 ounces (with batteries).

**Size:**

2.5 W x 4.5 H x 1.24 D inches  
(63.5 W x 114.3 H x 31.5 D mm).

**Operating Temperature:**

-20 to 120F (-30 to 50C).

**Case:**

Extruded aluminum body with nickel-plated aluminum end caps (gasket sealed).

### Keypad

Sealed membrane that is resistant to both water and petroleum products.

Four or five tactile-feedback keys.

### Transducer

Dual-element (transmit and receive).

1 to 10 MHz frequency range.

Locking quick disconnect LEMO connectors.

4 foot cable.

Custom transducers available for special applications.

### Power Source

Two 1.5V alkaline or 1.2V NiCad AA cells.

Typically operates for 80 hours on alkaline and 20 hours on NiCad.

Display flashes when battery is low. Unit turns off automatically when battery is too low to operate reliably.

### Display

Multi-function 4.5 digit liquid crystal display with 0.500 inch numerals, backlit for use in poor light conditions.

Backlight is selectable on/off/auto (illuminates only when taking a measurement).

Bar graph indicates stability of reading.

### Computer Interface

RS232 serial interface. PC software & USB converter cable included.

### Certification

Factory calibration traceable to NIST & MIL-STD-45662A.

### Warranty

5 year limited.

### Measuring

**Range:**

Measures from 0.025 to 19.999 inches (0.63 to 500 millimeters). Range dependent on material and transducer type.

**Units:**

English & Metric

**Resolution:**

0.001 inches (0.01 millimeters)

**Velocity Range:**

0.0492 to .5511 in/ $\mu$ s.  
(1250 to 14,000 m/sec)

Four readings per second for single point measurements.

**Velocity Settings:**

The **MX-1** has 1 custom velocity setting.

The **MX-2** has 8 factory presets and 2 programmable custom velocity options. The preset velocities are as follows:

1. Steel 4340	.233
2. Stainless Steel 303	.223
3. Aluminum 2024	.251
4. Cast Iron	.179
5. Plexiglass	.106
6. PVC	.094
7. Polystyrene	.092
8. Polyurethane	.070
9. Custom	
10. Custom	



## MADE IN THE USA

Distributed by:



### DAKOTA ULTRASONICS

1500 Green Hills Road, #107

Scotts Valley, CA 95066

Ph: (831) 431-9722

Fax: (831) 431-9723

Website: [www.dakotaultrasonics.com](http://www.dakotaultrasonics.com)

Email: [info@dakotaultrasonics.com](mailto:info@dakotaultrasonics.com)