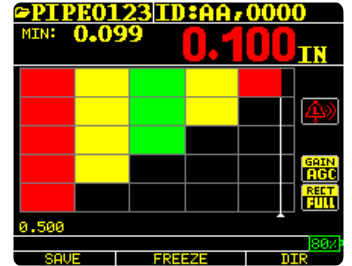


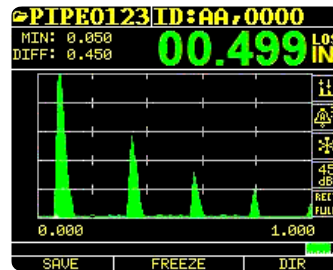
ULTRASONIC THICKNESS GAGES



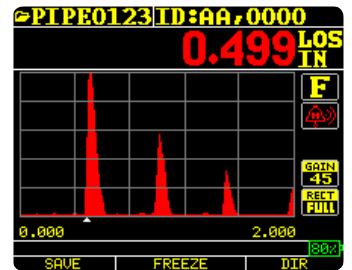
◀ The Magnaflux MT-2100 (color display) displaying echo to echo fully rectified



B-scan with variety of alarm conditions



Alarm off



Alarm tripped

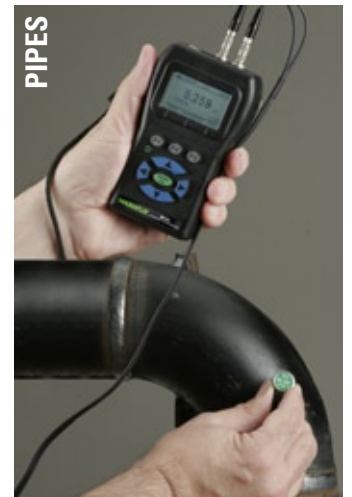
The Magnaflux MT-21 (monochrome display) ▶



CASTINGS



PLASTICS



PIPES

- Vibrates based on an alarm condition
- Illuminates the keypad on alarm condition
- Informs the operator when to replace the transducer

For more information, call us at 847-657-5300, email gages@magnaflux.com or visit magnaflux.com/gages.

We will review your application and arrange for a demonstration.

Magnaflux Ultrasonic Thickness Gages

MT-21B Monochrome Gage and MT-2100B Color Gage

Our most basic ultrasonic thickness gages. Capable of making accurate thickness readings on a variety of materials, with access to only one side of the product. These gages accept all of our transducers and may be field upgraded without return to the factory.

MT-21 Monochrome Gage and MT 2100 Color Gage

Combining the most popular features of our instruments including: gain adjust, vibrating and illuminated alarms, and Transducer Wear Alert (which informs the user when transducer replacement is needed). May be upgraded in the field to add Echo-to-Echo, B-Scan and 50,000 reading datalogger.

MT-21DL Monochrome Gage and MT-2100DL Color Gage

Adding a 50,000 reading flexible datalogger, B-Scan, and Echo-to-Echo to the features of the MT-21/MT-2100. The included custom molded pouch with belt clip is designed for left or right handed use.

See product differentiation chart for more details.

Specifications for the MT-21 series and MT-2100 series

Size: 5" (127 mm) (L) x 3" (76.2 mm) (W) x 1.25" (31.75 mm) (H)

Weight: 8 oz (.23 kg)

Thickness range: 0.025"–20" (.635mm–508mm) depending on material, temperature, and transducer selection

Material Velocity Calibration Range: 0.0200–0.7362 in/uS (0.508–18.699 mm/uS)

Temperature: Gage operating: -4° F to 122° F (-20° C to 50° C)

Surface temperature of material: Depending on probe use, from -5° F to 1000° F (-20° C to 537° C)

Battery life (MT-21 series): Up to 200 hours (40 hours with backlight on)

Battery life (MT-2100 series): Up to 50 hours (25 hours with backlight on)

Battery type: 2 "AA" alkaline

Display (MT-21 series): 128 x 64 graphics LCD monochrome

Color display (MT-2100 series): 170 x 220 high resolution TFT color display

Information displays: min, max, large reading while displaying min at the same time, velocity, zero, calibration, units, freeze, unfreeze, % battery life remaining, gain - low, std, high, LOS (loss of signal), echo to echo symbol

Resolution: .001" (.01 mm), .01" (.1mm)

Auto Probe Setup Parameters: Via pick list from a menu to set up gain, v-path and sensitivity

Delay line zero measurement: Auto at power up with listed numeric value. Ideal for correcting delay line wear/curvature and for transducer acoustic drift at elevated temperatures

Package: Custom, splash-proof, high impact plastic with illuminating rubber keypad for go/no-go testing

Bandwidth: 0.5–20 MHz (-3dB)

Units: English/Metric/Microseconds

Gain: Low, Standard and High for varying test conditions

Measurement rate: 4 or 20 measurements per second

Differential Mode: Displays the difference from the actual thickness measurement and a user entered reference value

Alarms: Minimum/Maximum depth, vibralarm, beeps and display flashes as well as keypad illumination

Illuminating keypad: F1 = Red, F2 = Yellow and F3 = Green for easy, go/no-go testing

Automatic probe wear indicator: Automatically informs the operator to replace the transducer (Patent Pending)

Ergonomics: User selectable lefty or righty display changes via keypad (Patent Pending)

Backlight: Light Emitting Diode (LED), On/Off or Auto On based on valid readings or last key press

Shut off: Auto, timeout (User programmable from 5-31 minutes or never shut off)

Fast Scan Min/Max mode: Displays minimum or maximum thickness value at 20 measurements per second (ideal for high temperature thickness readings and tracking the minimum depth alarm) while also displaying actual thickness

Protective Pouch: Custom molded pouch with belt clip and wrist strap for either lefty or righty operators (Optional)

Carrying Case: Hard plastic with high density molded cut out for all accessories

Freeze mode: Freezes display to hold onto last reading (ideal for high temperature applications)

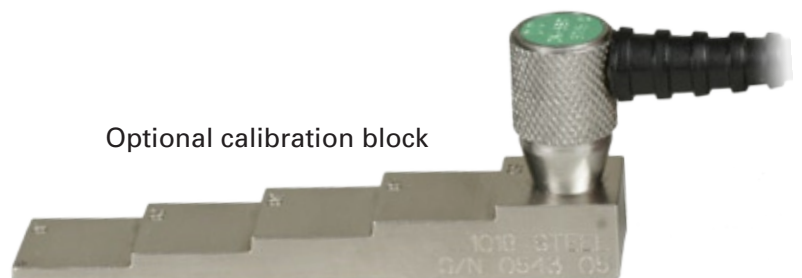
Hold mode: Holds display to retain last thickness reading in reverse video display

Standard MT-21B includes: Ultrasonic thickness gage, DK-537 potted, 5 MHz 0.375 inch diameter, operational manual, cable, couplant

Warranty: Limited 2 year warranty on parts and labor

Available Transducers

Model No.	Range in Steel	E-E Range in Steel	Frequency	Diameter	Temp. Range
DC110	.200" – 20" (5.08mm–508mm)	Not Recommended for E-E mode	1.0 MHz	1"/25.4mm	32–122°F/0–50°C
DC175	.150"–20" (3.81mm–508mm)	Not Recommended for E-E mode	1.0 MHz	0.75"/19.05mm	32–122°F/0–50°C
DC250	0.1" – 20" (2.5mm–508mm)	0.200"– 5" (5.08mm–127mm)	2.25 MHz	.5"/12.7mm	32–122°F/0–50°C
DK250	0.1" – 20" (2.5mm–508mm)	0.200"– 5" (5.08mm–127mm)	2.25 MHz	.5"/12.7mm	32–122°F/0–50°C
DC525	0.030" – 20" (.76mm–508mm)	0.078"– 2" (2mm–50.8mm)	5.0 MHz	0.25"/6.35mm	32–122°F/0–50°C
DK525	0.030" – 20" (.76mm–508mm)	0.078"– 2" (2mm–50.8mm)	5.0 MHz	0.25"/6.35mm	32–122°F/0–50°C
DC537	0.040" – 20" (1mm–508mm)	0.078"– 2" (2mm–50.8mm)	5.0 MHz	.375"/9.52mm	32–122°F/0–50°C
DK537	0.040" – 20" (1mm–508mm)	0.078"– 2" (2mm–50.8mm)	5.0 MHz	.375"/9.52mm	32–122°F/0–50°C
DHT-537	0.040" – 20" (1mm–508mm)	0.078"–2" (2mm–50.8mm)	5.0 MHz	.375"/9.52mm	(–5 to 950°F or –20–509°C)
DC550	0.030" – 20" (.76mm–508mm)	0.078"–2.0" (2mm–50.8mm)	5.0 MHz	.5"/12.7mm	32–122°F/0–50°C
DK550	0.030" – 20" (.76mm–508mm)	0.078"–2.00" (2mm–50.8mm)	5.0 MHz	.5"/12.7mm	32–122°F/0–50°C
DK718	0.030" – 2.0" (.76mm–50mm)	0.059"–1.0" (1.5mm–25.4mm)	7.5 MHz	.187"/4.75mm	32–122°F/0–50°C
DC1025	0.020" – 2.0" (.5mm–48.2mm)	0.059"–1.0" (1.5mm–25.4mm)	10.0 MHz	.25"/6.35mm	32–122°F/0–50°C
DK1025	0.020" – 2.0" (.5mm–48.2mm)	0.059"–1.0" (1.5mm–25.4mm)	10.0 MHz	.25"/6.35mm	32–122°F/0–50°C
DK10125	0.040" – 0.75" (1mm–19mm)	Not Recommended for E-E mode	10.0 MHz	.125"/3.17mm	32–122°F/0–50°C
DK718EE	0.040" – 1.5" (1mm–38.1mm)	0.059" – 1.0" (1.5mm–25.4mm)	7.5 MHz	.187"/4.75mm	32–122°F/0–50°C
DK537EE	0.040" – 20" (1mm–508mm)	0.078"–1.5" (2mm–38.1mm)	5.0 MHz	.375"/9.52mm	32–122°F/0–50°C



Optional calibration block

Which Thickness Gage is Best for Your Application?

Item	Specification	MT-2100DL	MT-2100	MT-2100B	MT-21DL	MT-21	MT-21B
Thickness range	0.025–20 inches (.635mm–508mm)	✓	✓	✓	✓	✓	✓
Delay line zero measurement	Auto at power up with listed numeric value. Ideal for correcting delay line wear/curvature and for transducer acoustic drift at elevated temperatures	✓	✓	✓	✓	✓	✓
Scan mode	Displays minimum or maximum thickness value at 20 measurements per second	✓	✓	✓	✓	✓	✓
Hold mode	Holds display to retain last thickness reading with reverse video display	✓	✓	✓	✓	✓	✓
Freeze mode	Freezes display	✓	✓	✓	✓	✓	✓
Units	Inches/Millimeters/Microseconds	✓	✓	✓	✓	✓	✓
Gain	Low, Standard or High for varying test conditions	✓	✓	–	✓	✓	–
Differential Mode	Displays the difference from the actual thickness measurement and a user entered reference value	✓	✓	–	✓	✓	–
Alarms	Minimum/Maximum depth, vibralarm, beeps and display flashes as well as keypad illumination and vibration	✓	✓	–	✓	✓	–
Illuminating keypad	F1 = Red, F2 = Yellow and F3 = Green for easy, go/no-go testing	✓	✓	–	✓	✓	–
Automatic probe wear indicator	Automatically informs the operator to replace the transducer (Patent Pending)	✓	✓	–	✓	✓	–
Echo-to-Echo	Measures the metal thickness only (ignore paint and coatings)	✓	–	–	✓	–	–
Non-Encoded B-Scan	Displays a cross section of the test piece	✓	–	–	✓	–	–
Data Logger Version	50,000 thickness data logger with ID point in linear or grid files (100 to 5000 readings per file)	✓	–	–	✓	–	–
Carrying Pouch	Custom molded with belt clip and elastic strap	✓	–	–	✓	–	–

All software options are field upgradeable, no need to return the unit to the factory



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 or visit magnaflux.com/gages.