



NONDESTRUCTIVE TESTING

Magna-Mike[®] 8500

Precision Thickness Gages



PRECISION THICKNESS GAGE

The Panametrics-NDT™ Magna-Mike Model 8500 is a handheld thickness gage that utilizes a magnetic method to make reliable and repeatable measurements on nonferrous materials. Operation of the Magna-Mike is very simple. Measurements are made when its magnetic probe is held on one side of the test material and a small steel target ball is placed on the opposite side. A Hall-effect sensor built in the probe measures the distance between the probe tip and target ball. The measurement is instantly displayed as an easy-to-read digital thickness reading.

Plastic Bottles

In applications such as plastic containers, the operator simply drops the small target ball inside the container. The magnetic probe held on the outsider of the container attracts the target ball.

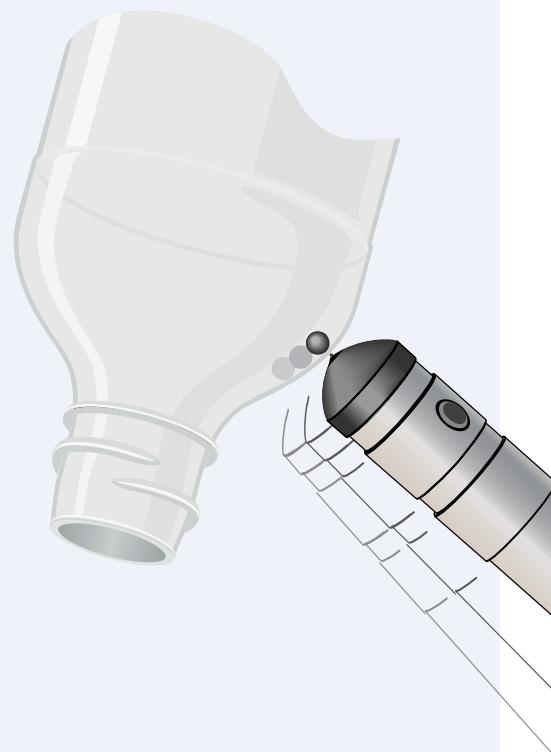
When the operator scans the probe along the surface or critical corners, the small steel target ball will follow. In the Minimum Mode feature, the gage continually displays both the actual thickness and the lowest thickness reading.

Other Applications

The Magna-Mike 8500 is the ideal instrument for measuring difficult shapes and sizes. Nondestructive measurement capabilities allow for pinpoint thickness readings in tight corners and grooves down to a radius of 1/32". The Magna-Mike has been successfully integrated into quality control programs for glass and aluminum containers, aerospace composite parts, medical packaging, automotive panels, airbag tear seams, and other parts made from nonferrous materials.

FEATURES

- Minimum Mode continually displays lowest thickness readings
- Handheld and lightweight (2.1 lb.)
- Few keys for simple operation
- Backlight LCD with large numerals
- Fast thickness measurements up to 16 per second
- Finds minimum thickness in tight corners
- Easily measures center of large parts
- Accuracy not dependent upon shape or properties of test material
- Internal file-based datalogger stores up to 95,000 thickness readings



MAGNA-MIKE® 8500 SPECIFICATIONS*

THICKNESS RANGE AND ACCURACY

Target Ball Diameter	Thickness Range (with standard probe)	Calibrated Accuracy
1/16" (1.59mm)	0.0001-0.0900" (0.001-2.590mm)	±3%*
1/8" (3.18mm)	0.0001-0.1800" (0.001-4.570mm)	±2%*
3/16" (4.76mm)	0.0001-0.2500" (0.001-6.350mm)	±1%*

Accuracy depends upon thickness range.
For detailed specifications see manual.

Scan Rate: Up to 16 measurements per second, selectable

Min Mode: Rapidly locates and displays Minimum Thickness measurement

Resolution: 0.001 or 0.0001" (0,01 or 0,001mm), selectable

Display: Liquid Crystal Display (LCD), black on gray, with electroluminescent backlight, and adjustable contrast. Can display active reading, Min reading, Alarm status, and data file information simultaneously

Datalogger: Stores, recalls, clears and transmits up to 95,000 thickness readings with 8-character file names and 16 character alphanumeric identification codes

Data Output: Serial RS-232 port. Baud rate, parity, and stop bits are all keypad selectable

On-board Reports: Min, Max, SD, Mean, Median, File Comparison

Calibration: Two point standard calibration and up to 8 reference points

Differential Mode: Displays difference between actual reading and preset reference value

Alarm Mode: Programmable Hi-Low Alarm setpoints with audible and visual indicators

Line Power: 100/120/220/240 VAC, 48-62 Hz

Battery: Rechargeable NiCad battery. Battery duty cycle is 8-16 hrs depending on backlight usage. Recharge time is 2 hours

Metric/English: Inches or millimeters

Languages: English, French, German, and Spanish

Operating Temperature: 0° to +50°C (+32°F to +122°F)

Size: 9.375 x 5.45 x 1.5" (238 x 138 x 38mm)

Gage Weight: 2.1 lbs / 0,95 Kg

STANDARD INCLUSIONS

The Magna-Mike Model 8500 Hall Effect Thickness Gage with Internal Alphanumeric Datalogger, including:

- Standard Probe (801PR)
- Probe Stand (80PRS)
- Basic Gage Stand (85RPC)
- Probe Cable (851PC)
- Microsoft Windows®/Excel based Interface Program (WIN8500)
- User Manual (85MAN)
- Pocket Reference Card (85REF)
- NiCad Rechargeable Battery (85BAT)
- External Power Supply/charger for 8500
- RS232 I/O Cable, 9 pin female (8509F)
- Target Ball and Calibration Kit (80ACC-KIT), including target ball set (1/16", 1/8", 3/16" dia), calibration standards: 0.010"/0,25mm, 0.040"/1mm, 0.160"/4mm (for measurements over 0.160"/4mm, see optional accessories)

OPTIONAL ACCESSORIES

8525F	RS-232 I/O Cable, 25 pin female
85FSW	Remote Footswitch - Fits 2 pin Lemo® connector
80CAL-020	0.020" (0,5mm) calibration standard
80CAL-080	0.080" (2mm) calibration standard
80CAL-240	0.240" (6mm) calibration standard for applications over 0.160" (4mm) thick
80CAL-NIS	NIST-traced calibration standards (set of six)
85BAT	Rechargeable Battery
851PC	Spare Probe Cable (for 801PR)
851CC	Coiled 12 ft (4m) Probe Cable (for 801PR)
802PR	Probe with second function button for large test specimens
802PR-109	Probe, Extended Range capability to .400" (10mm)
852CC	Coiled 12 ft (4m) Probe Cable (for 802PR series)
852PC	Straight 3 ft (1m) Probe Cable (for 802PR series)
85PRT	Thermal Serial Printer with Cable and Paper (80PP)
80FXV	V-Notch Fixture for Probe



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