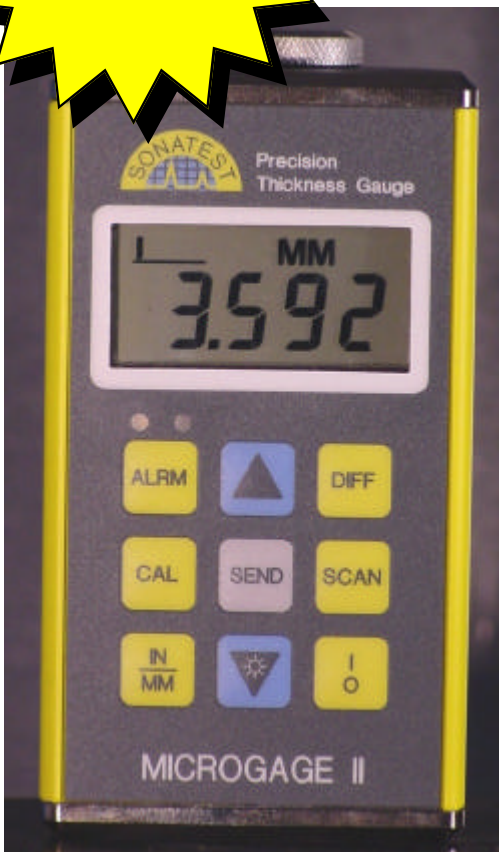


MICROGAGE II

NEW
Plastics Mode



Introducing the **MICROGAGE II** the new precision thickness gauge from the Sonatest Group.

Designed with the user in mind, the **MICROGAGE II** utilises state-of-the-art digital technology to produce fast and accurate readings

PACKAGING Is an aluminium sealed case, protecting the unit in the harshest of working environments.

SIZE 63.5 mm W x 120.7 mm H x 31.8 mm D. Small and portable, the Microgage II operates on 2 AA batteries for 150 hours plus.

FEATURES include:

Alarm mode

Differential Mode

RS 232 data output port

MEASURING RANGE

Standard Mode

From 0.15 to 25.40 mm

Plastics Mode

From 0.15 to 1.5 mm

ECHO-TO-ECHO MODE available to measure thin materials. Switches automatically to **INTERFACE ECHO MODE** when measuring thicker materials and plastics.



THE STANDARD HAS BEEN SET!

MICROGAGE II

The new **MICROGAGE II** is a simple to use hand-held Precision Thickness Gauge. The variety of features offered by the MICROGAGE II allows the user to select a quality tool that will exceed their application needs. The Echo-to-Echo allows the measurement of the thickness of materials without removing paint or coatings.

The Plastics mode in the **Microgage II P**, makes this gauge ideal for plastics manufacturing applications, mouldings and production industries.

SPECIFICATIONS

PHYSICAL

Weight:

285 g with batteries (10 ounces)

Size:

63.5 W 120.7 H x 31.8 D mm
2.5 W" x 4.75" H x 1.25" D

Operating Temperature:

-30° to 50° C (-20° to 120° F)

Case:

Extruded aluminium body with nickel-plated aluminium end caps. Resistant to impact and environmentally sealed.

KEYPAD

Sealed membrane resistant to both water and petroleum products. Nine tactile-feedback keys.

TRANSDUCERS

Single element with delay tip
10 - 22 MHz frequency range
Locking quick disconnect LEMO connector.
4 foot cable.

Customised transducers for plastics mode are built with differing acoustic impedance to plastic.

Custom transducers available for special applications.

CERTIFICATION

Factory calibration traceable to national standards

POWER SOURCE

Two 1.5V alkaline or 1.2V NiCad AA cells

Typically operates for 150 hours on alkaline batteries and 100 hours on NiCad batteries.

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

DISPLAY

Multi-function 4.5 digit LCD with 0.500 inch numerals, backlit for use in poor light conditions

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

Measurements displayed in millimetres and metres/second or inches and inches/microsecond,

Bar graph to indicate reading stability.

MEASURING

Overall Range:

Measures from 0.15 to 25.40 mm (0.0060 to 1.0000 inches).
Switch to select English or metric units.

Resolution:

0.001 mm (0.0001 inches)

Velocity Range:

1250 to 10,000 m/sec
(0.0492 to 0.3937 in/ μ s)

MEASURING MODES

Interface to Echo, Echo-to-Echo (through paint) and **Auto –Switchable**

Four readings per second for single point measurements or 8 per second in **Scan Mode**—captures the minimum thickness.

Single point calibration

FEATURES

DIFFERENTIAL MODE

Enter the acceptable thickness value, unit will display +/- the difference from the value entered.

ALARM MODE

Enter a minimum acceptable thickness value. If the measurement falls below the minimum, a red LED illuminates and an alert beeper will sound. If measurement is above the minimum value a green LED illuminates.

DATA OUTPUT

RS232 output sends data to a serial printer, a computer or other external storage devices.

WARRANTY

5 year limited



For further information contact:

Sonatest Plc

Dickens Road, Old Wolverton,
Milton Keynes, MK12 5QQ, UK.

Tel: +44(0)1908 316345

FAX: +44(0)1908 321323

Email: sales@sonatest-plc.com

Distributed by:

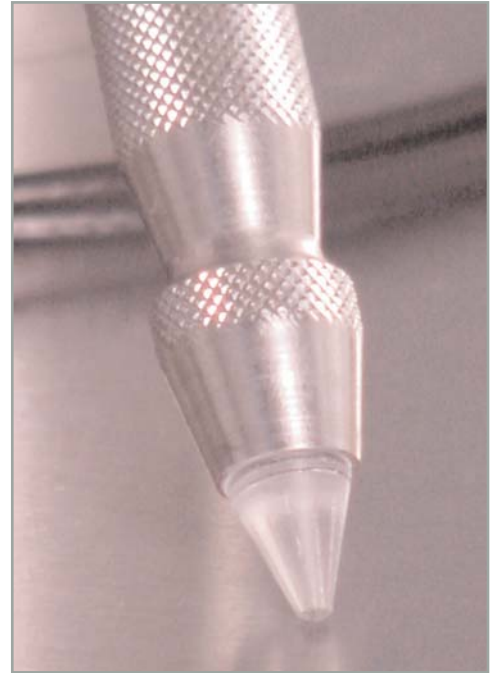
MICROGAGE VX

The **Microgage VX** is fitted with an adjustable square wave pulser, which provides the flexibility necessary for both high resolution and penetration requirements.

The selectable viewing options to provides users with additional flexibility during operation: (RF waveform, +/- Rectified waveform, Large Digits with Scan Bar).

The A-Scan rectified mode of this model is commonly used for detecting flaws/pits in pulse-echo mode, measuring thru-paint and coatings in echo-echo mode. Whereas the time-based B-Scan feature displays a cross section of the test material. This is mainly used to display the profile of the opposite surface of the test material.

Adjustable resolution settings enhance the Microgage VX's flexibility, with the AGC gain control allowing multiple echo and thru-paint measurement.



Other versatile features of this unit includes, multiple calibration options; One-Point, Two-Point, or selection from a material list and 16 factory setups and 48 user-defined setups, with the User-defined setups that can be edited for custom applications.

Equipped with an alpha-numeric data logger to provide increased versatility for those custom reporting needs. The High Speed Scan feature speeds up the inspection process by taking 32 measurements per second. Removing the transducer from the test material displays the minimum measurement scanned.

The Auto-Find feature locates the detection point(s) and adjusts the display settings to bring the waveform into view.

2 year limited warranty.

APPLICATIONS

Stamping Industry
Aerospace Industry
Plastics Industry
Anything with thin wall components

Ultrasonic Precision A-Scan Thickness Gauge

SPECIFICATIONS

Physical

Weight:

13.5 ounces (with batteries).

Size:

63.5 W x 165 H x 31.5D mm
(2.5W x 6.5H x 1.24D inches).

Operating Temperature:

-10° to 60°C (-14° to 140°F).

Keyboard:

Membrane switch with twelve tactile keys.

Case:

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

Data Output:

Bi-directional RS232 serial port.
Windows® PC interface software.

Display:

45.7mm VGA grayscale display.
(240 x 160 pixels).
Viewable area
62 x 45.7mm (2.4 x 1.8 in)
EL backlit (on/off/auto).

Ultrasonic Specifications

Measurement Modes:

Pulse-Echo (Precision-General purpose)
Interface-Echo (Precision-Thick materials)
Echo-echo (Precision- thru paint).

Pulser:

Square wave pulser with adjustable pulse width (spike, thin, wide).

Receiver:

Manual or AGC gain control with 40dB range, depending on mode selected.

Timing:

40 MHz with ultra low power
8 bit digitizer.

Measuring Range:

Interface-Echo Mode: Steel
1.27 - 25.4mm (0.0580-1.0 in)
Plastics from 0.127mm (0.005in)

Echo-Echo Mode:

Steel
0.15 - 12.7mm (0.006 - 0.500 ins).

Pulse-Echo Contact:

Steel
1 - 254 mm (0.040 to 10.0 ins)
Plastics from 0.254mm (0.10 ins)

Echo-Echo Contact:

Steel
thru paint 2.54 - 76.2mm
0.100in - 3.00 in

Resolution:

Selectable
+/- 0.01mm (.001in)
+/- 0.001mm (.0001in)

Velocity Range:

1250 to 9999 meters/sec
.0492 to .3936 in./ms
One and Two point calibration option,
or selection of basic material types.

Units:

English & Metric

Display Views:

A-Scan
Rectified +/- (halfwave view)
RF (full waveform view)

B-Scan Time based cross section view. Display speed of 15 secs per screen.

Large Digits Standard thickness view. Digit Height: 0.400 in (10mm).

Scan Bar Thickness 6 readings per second. Viewable in B-Scan and Large Digit views.

Repeatability Bar Graph

Indicates stability of reading.

Certification

Factory calibration traceable to national standards.

Warranty

2 year limited

Power Source:

Three 1.5 alkaline or 1.2V NiCad AA cells.
Typically operates for 150 hours alkaline) and 100 hours (NiCad).
Auto power off if idle for 5 minutes.
Battery Status meter.

Data Logger (Internal)

12,000 readings & waveforms (alpha numeric storage).
OBSTRUCT to indicate inaccessible locations.

Memory:

16 megabit non-volatile ram.

Transducer Types:

Single Element (1 to 20 MHz).
Locking quick disconnect
"00" LEMO connectors.
Standard 4 foot cable.
Custom transducers and cable lengths available.

Features

Setups:

16 factory and 48 custom user-defined setups.

Gates:

Single gate in contact mode
Single gate with holdoff in interface - echo, echo-echo and plastics mode.
Adjustable threshold.

Multiple Measurement Mode:

Selectable modes for a use with a variety of applications.

Alarm Mode:

Set hi and lo tolerances with audible beeper and visual LEDs.

Fast-Scan Mode:

Takes 32 readings per second and displays the minimum reading found when the transducer is removed.
Display continuously updates while scanning.



Iss 1/05_2006
Part No: 147305 Issue 2



For further information contact:

Sonatest Ltd
Tel: +44(0)1908 316345
FAX: +44(0)1908 321323
Email: sales@sonatest.com
www.sonatest.com

Distributed by:

