

CanNeed-MBT-300 Hall Effect Thickness Gauge (Magnetic Bottle Thickness Gauge)



- 1) Measure the thickness of nonmagnetic material
- 2) Measure the thickness up to 25.4 mm
- 3) The probe is rather wearable
- 4) Large display screen and large letters
- 5) Additional 5.00 and 7.00mm magnetic balls
- 6) Auto capture the Max and Min value
- 7) Multi-Calibration points up to 9



Glass Bottle Measuring



Aluminum Bottle Can Measuring



Aluminum Bottle Can Measuring



CanNeed-MBT-300 Package

The "CanNeed-MBT-300 Hall Effect Thickness Gauge (Magnetic Bottle Thickness Gauge)" is a refined portable thickness gauge. It is used to measure the thickness of nonmagnetic material, such as plastic, glass, synthetics, aluminum and titanium, etc. The measurement accuracy is undistorted by the samples' shapes.

CanNeed-MBT-300 is based on the theory of Hall Effect. For test, place the steel ball on one side of the sample and the probe on the other side. The Hall Effect sensor on the probe measures the distance from the probe tip to the steel ball. The calculator will display the real thickness readings.

New Attributes:

- With a more wearable probe
- More sizes of magnetic balls: 5.00mm and 7.00mm
- Larger measuring range: up to 25.4mm,new extensive calibration set.
- Larger color screen, larger letters
- RS-232 output,can connect to SPC system
- Display the real time thickness readings and automatically capture Max,Min and average value.
- Rapid measurement, up to 16 times per second
- Accuracy: $\pm 1\%$

- It stores 95,000 thickness readings as the internal data record
- Save the calibration file and allocate the calibration file saved.
- New machine appearance design
- Foot switch function
- With strip-graphic view of statistical data



new appearance



strip-graphic view of statistical data

Technical Data:

Steel Ball Dia.	Thickness Range (Standard Probe)	Accuracy (Single-point calibration)	Accuracy (Multi-point calibration)
1/16"(1.59mm)	.0004-.0900"(0.1000-2.590mm)	±4%*	±3%
1/8"(3.18mm)	.0004-.1800"(0.1000-4.570mm)	±4%	±2%
3/16"(4.76mm)	.0004-.2500"(0.1000-6.350mm)	±3%	±1%
5.00 magnetic ball	.0004-.7500"(4.00-19.00mm)	±3%	±1%
7.00 magnetic ball	.0004-.7500"(4.00-25.4mm)	±3%	±1%

Accuracy : subject to thickness range.Pls refer to the user manual for details.

Scanning Speed : up to 16 times (Optional)

Resolution : 0.01 mm or 0.001 mm (0.001" or 0.0001")

Display : LCD display, can display the real time reading, minimum reading, alarm status and data document information at the same time.

Data Recorder : It stores, reviews, eliminates and transfers 95,000 thickness readings and documents in numeric identifying code.

Data Output : RS-232 serial port

On-site Report: : Minimum value, maximum value, average value,SD

Calibration : Two-point standard calibration, or multi-calibration up to 9 reference points

Deviation Mode : Display the difference between the actual thickness and the pre-set reference thickness

Alarm Mode : Programmable, vocal and indication-visible high and low alarm setting points

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

Battery : Rechargeable Nickel-Cadmium battery. According to the working status of background light, it can last for 8-16 hours. Charging time is 2 hours.

Metric/Imperial Unit : Inch or mm for option

Language : English/Chinese

Working Temperature : 0 - +50°C

Dimension : 300 x 190 x 50mm

N.W. : 4 kg

Excellent Performance:

1. Powerful display interface.
- 1) Optional view mode



usual view



advanced view

- 2) Advanced view can display real-time value,Max,Min and average value
- 3) Advanced view provides strip-graphic view of statistical data,helping to observe the measured changes in thickness
- 4) Rechargeable nickel batteries and display remaining power
- 5) Arbitrarily set the alarm value
2. Fast calibration.



ball adjustment device



reference thickness calibration cell

- 1)single calibration

Before starting to work and different sizes at each ball switch,carry out single calibration.

According to the steps on the screen,take the ball off the probe,place the target ball onto the adjustment

device and on top of the probe, then press "CAL" to finish the single calibration. The whole procedure only takes 5 seconds.

2) Multi-calibration

When replacement, falling off, abrasion, contact with strong magnetic objects happens to probe, or users want to get a higher accuracy of testing result, carry out multi-calibration.

According to the steps on the screen, take the ball off the probe, place the target ball onto the adjustment device and on top of the probe, then press "enter", both current thickness value and standard value will show on screen, you can adjust it manually if there is inconsistency. Increase next reference point and repeat the same steps, you can finish the multi-calibration up to 9 points. The whole procedure takes 2 minutes.

Standard Configuration:

- Main unit
- Standard probe
- Probe stand
- Probe cable
- User manual
- External power supply and charger
- Steel balls with diameters 1/16", 1/8", 3/16"
- Reference thickness calibration cell: 0.010"/0.25 mm, 0.04"/1 mm, 0.160"/4 mm (If pre-test sample is over 0.160"/4 mm, accessories are optional by order.)

