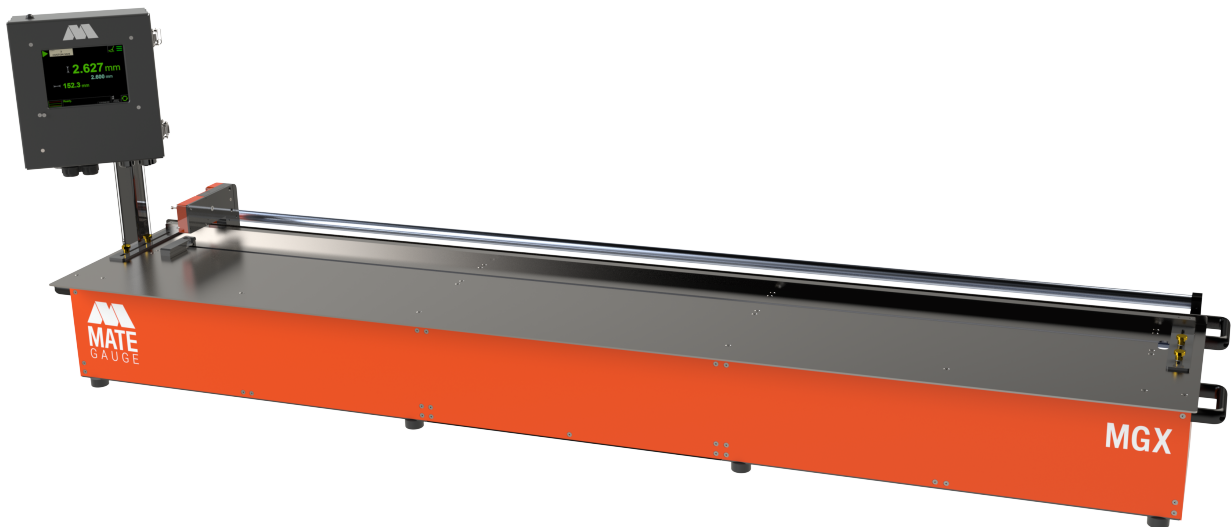


# MGX80”

## NON-CONTACT THICKNESS MEASURING SOLUTION FOR NEAR-LINE MATERIAL SAMPLING.

The MGX80” is designed to be a simple and accurate measuring system. It is a perfect fit for any application requiring quick and accurate thickness measurements on a wide material samples.



## MATE GAUGE ADVANTAGES

- Eliminates time-wasted performing & recording dozens of manual measurements
- Eliminates inaccurate or inconsistent measurement of samples by hand
- Eliminates recording error of handwritten measurements
- Eliminates sample damage or compression due to contact measurement
- Easy to calibrate and maintain
- Requires little-to-no operator training



## WHY CHOOSE THE MGX80”?

- **Laser measurement for unmatched precision:** Laser sensors measure the thickness and width of any material samples. Removes the need to rely on inaccurate hand micrometer measurements and slowing down operators with manual (and unreliable) product quality checks.
- **Side to side thickness measurement:** Scanning laser heads measure thickness across individual strips. Avoids relying on the outside strips to control your process.
- **PLC Connection:** Engineered to blend seamlessly into your production line, the MGX can connect directly to your PLC. This makes for centralized control and easy changes in product specifications and gauge settings. With built-in Ethernet ports, it's as simple as plug in and go.
- **Monitor thickness measurement in real-time:** Our on-screen data visualizations are purpose-built for operator ease. Monitor real-time thicknesses and run charts of multiple locations across your product. Automatically connect to your existing systems to set thickness targets and key thresholds. Be immediately notified by on-screen alarms when issues arise.
- **Keep an eye on your lines without leaving your desk:** You'll have full access to real-time measurement data, as well as the ability to track trends over run-time and perform data file downloads. All of this with ironclad security - your data is only accessible via your facilities local network.
- **Ease of use and stress-free maintenance:** The belt-driven, single actuator includes built-in centering for in-field positioning. Calibration, using the NIST-traceable master calibration block, only needs to be done once every 3 months. The laser sensors' modular design and quick electrical disconnects means, when needed, they are quickly and easily replaced. The belt-drive actuator design is familiar making it easy to maintain.
- **Monitor and reduce dirt accumulation:** When the sensors get dirty, our alert system makes sure you're immediately notified. Dirty sensors are easily retracted and quickly cleaned with no disruption to your production line. The actuator's overhead position, located away from materials, reduces the risk of particulates entering the drive system and helps eliminate failure points.

# TECHNICAL SPECIFICATIONS

## THICKNESS MEASUREMENTS DETAILS

Resolution 0.5  $\mu\text{m}$  [0.00002 in]

Accuracy (typical) 2  $\mu\text{m}$  [0.00008 in]

Stroke 2032 mm [80 in]

Scanning Speed 150 mm/sec [6 in/sec]

Thickness Range 0 to 10 mm [0 - 0.394 in]

Measurement Frequency 1 to 5 kHz

## SUPPLY REQUIREMENTS

Power 100-240 VAC, 50-60 Hz: 1A

## WEIGHT

Complete Assembly 100 kg [220.5 lbs]

## PHYSICAL DIMENSIONS

Main Housing 2321x556x346 mm [91.4x21.9x13.6 in]

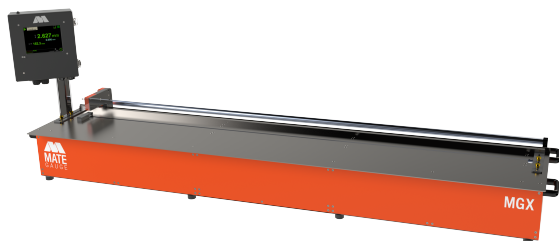
## ENVIRONMENTAL REQUIREMENTS

Operating Temperature 15 °C to 45 °C [59 °F to 113 °F]

Humidity < 90%

## WHAT'S INSIDE THE BOX?

The benchtop system is ready to run out-of-the-box. It includes two laser sensors, c-frame, scanning belt drive system, NIST traceable calibration reference block, board support arms, and a built-in touchscreen and measurement tray.



Laser Gauge



Power Cable

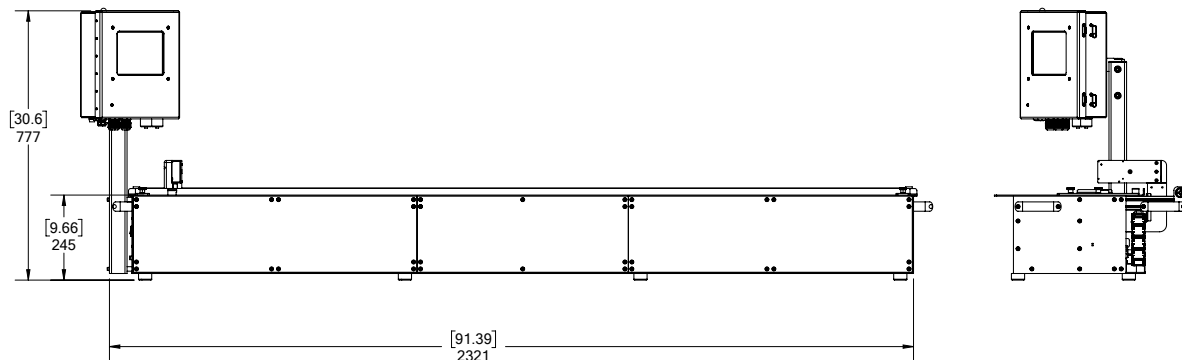
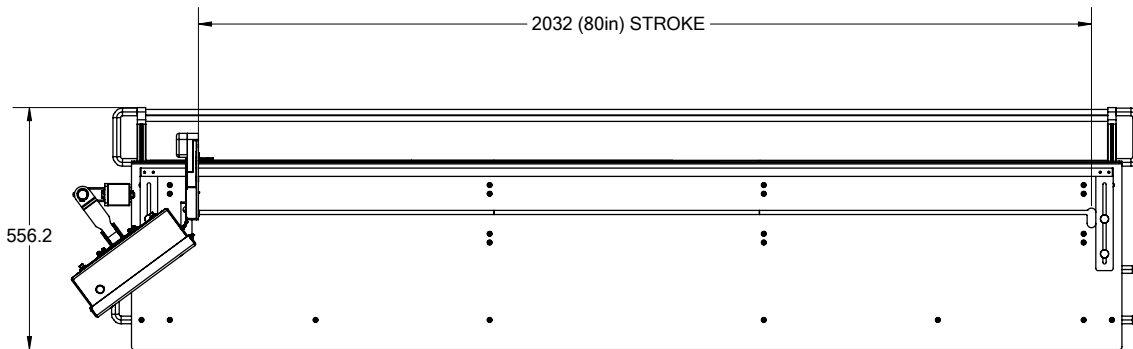
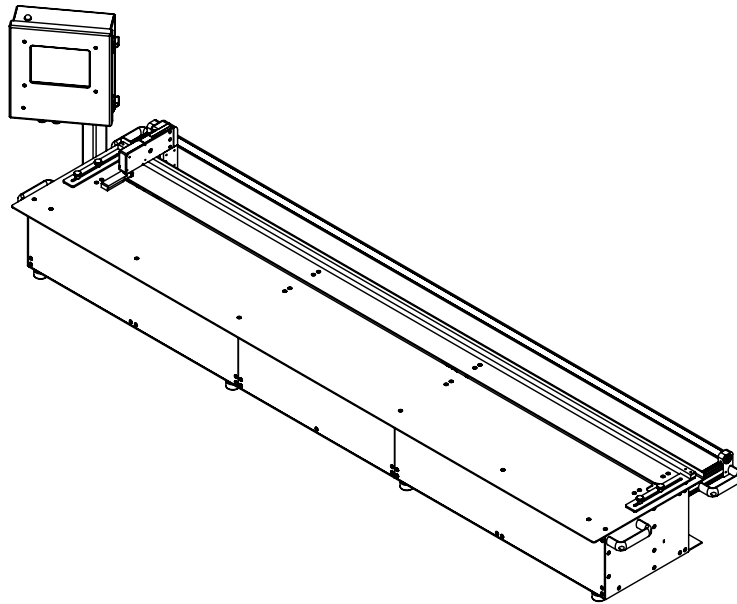


N.I.S.T. Traceable Calibration Block



Calibration Block Holder

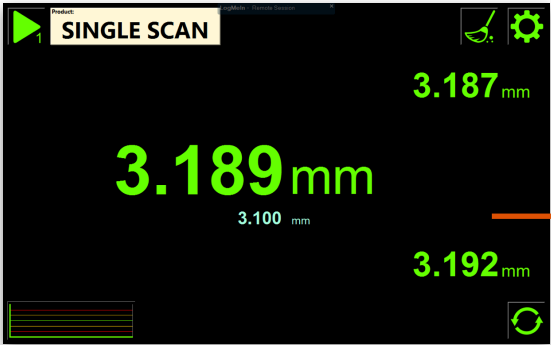
# MGX-80 Schematics



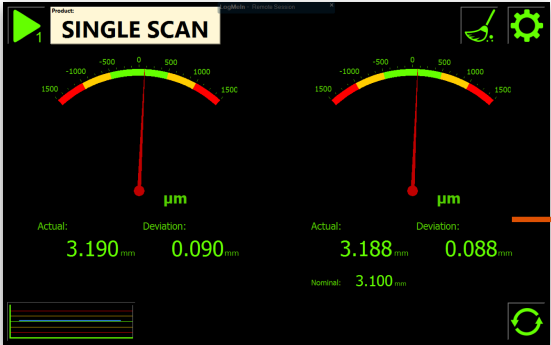


# MGX Controls and Displays

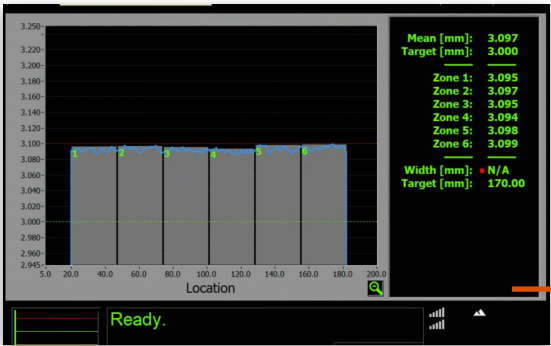
## Purpose-built for operator ease



Large numerical display



Needle gauge location showing left-right thickness



**Virtual Micrometer** - all the capabilities of a standard micrometer. View thickness for selected Vmic number, adjust anvil size and spacing.



See sample thickness over time

Not sure which Mate Gauge is right for you? Check out our other options.



## Compact and lightweight

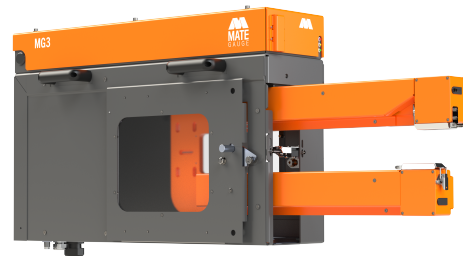
The MG1 provides thickness measurement solutions that fit your floorspace and budget.

[Learn more](#)

## Our Flagship Gauge

Tolerant of dirt and temperature swings, the MG3 provides rich data for your inline needs

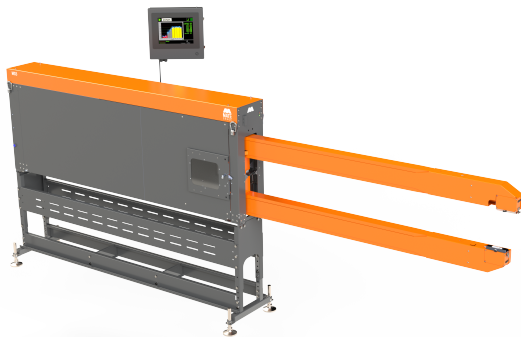
[Learn more](#)



## No area is out of reach

The MG5 is a large scale thickness scanner designed for wide continuous-strip materials.

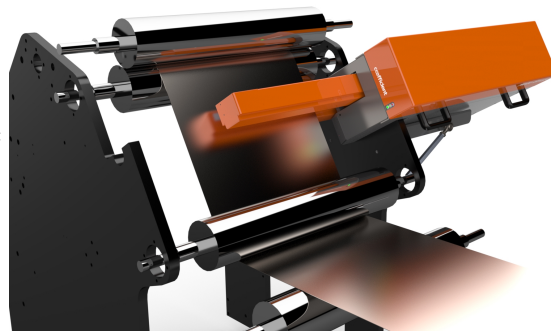
[Learn more](#)



## For cast lead strips

The MG-CLS improves lead strip thickness control with automatic measurement.

[Learn more](#)



**Beyond measure.**

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