

MG3

OUR FLAGSHIP INLINE GAUGE



KEY FEATURES

- ✓ NON-CONTACT MEASUREMENT
- ✓ FULL STRIP PROFILE DISPLAYED
- ✓ ACTIVE THERMAL CONTROL
- ✓ TOUCHSCREEN DISPLAY
- ✓ EASILY INSTALLED AND MAINTAINED
- ✓ NETWORKABLE
- ✓ REMOTE SUPPORT
- ✓ DATA LOGGING

WHY CHOOSE THE MG3?

- **Laser measurement for unmatched precision:** Laser sensors measure the uneven lead strip surfaces as they are being cast. Removes the need to rely on inaccurate hand micrometer measurements and line stoppages to check product quality.
- **Continuous measuring across your pasting lines:** Our “gauge and go” continuous measurement system enables operators and managers to monitor thickness during the entire operation.
- **Side to side thickness measurement:** Scanning laser heads measure thickness across individual strips. Avoids relying on the outside strips to control your process.
- **Automatic adjustments to control thickness:** Both PLC and analog integration available. Mate Gauge can communicate directly to existing plant control systems to help optimize production in real-time. It's like an ideal operator constantly taking accurate measurements and instantly making speed adjustments to improve product thickness.
- **Control over temperature fluctuations:** Temperature monitoring sensors, backed up by our master reference point technology, prevent inaccurate measurements caused by temperature fluctuation. Working, on a timer, with flying spot sensors, the master reference point reacts to temperature changes. When a change is detected, the equipment automatically adjusts to the correct base measurement level.
- **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 the strip. 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:** Sensors with air purge covers help reduce dirt buildup. However, when the sensors do get dirty, our alert system makes sure you're immediately notified. Dirty sensors are easily retracted and quickly cleaned with no disruption to your manufacturing line. The actuator's overhead position, located away from conveyors, moving materials and strips, reduces the risk of particulates entering the drive system and helps eliminate failure points.

TECHNICAL SPECIFICATIONS

THICKNESS MEASUREMENTS DETAILS

Resolution	0.5 µm	[0.00002 in]
Accuracy (typical)	4 µm	[0.00016 in]
Stroke	515 mm	[20.28 in]
Scanning Speed	150 mm/sec	[6 in/sec]
Thickness Range	0 to 20 mm	[0 to 0.79 in]
Measurement Frequency	1 to 5 kHz	

SUPPLY REQUIREMENTS

	Line Unit	HMI
Power	4.4A @ 115V/60 Hz	2A @ 240V/50 Hz

WEIGHT

Complete Assembly	49 kg	[108 lbs]
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PHYSICAL DIMENSIONS

Main Housing	779x497x238 mm	[31x20x9 in]
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ENVIRONMENTAL REQUIREMENTS

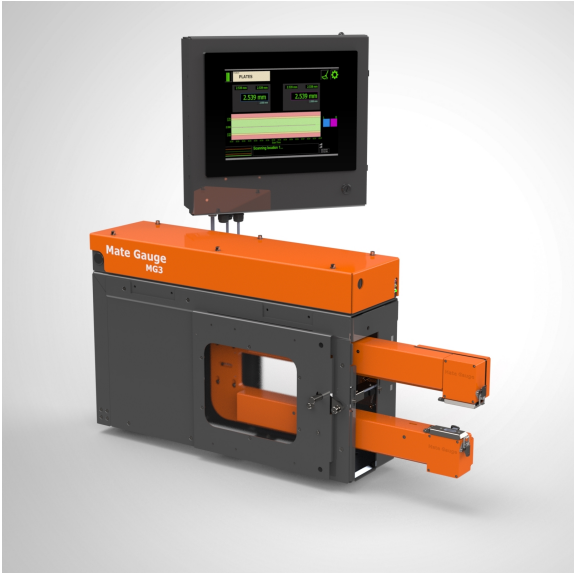
Operating Temperature	10 °C to 50 °C	[50 °F to 120 °F]
Humidity	< 90%	

PART NUMBER

Item	Part Number	Description
1	10042215	MG3 Standard System

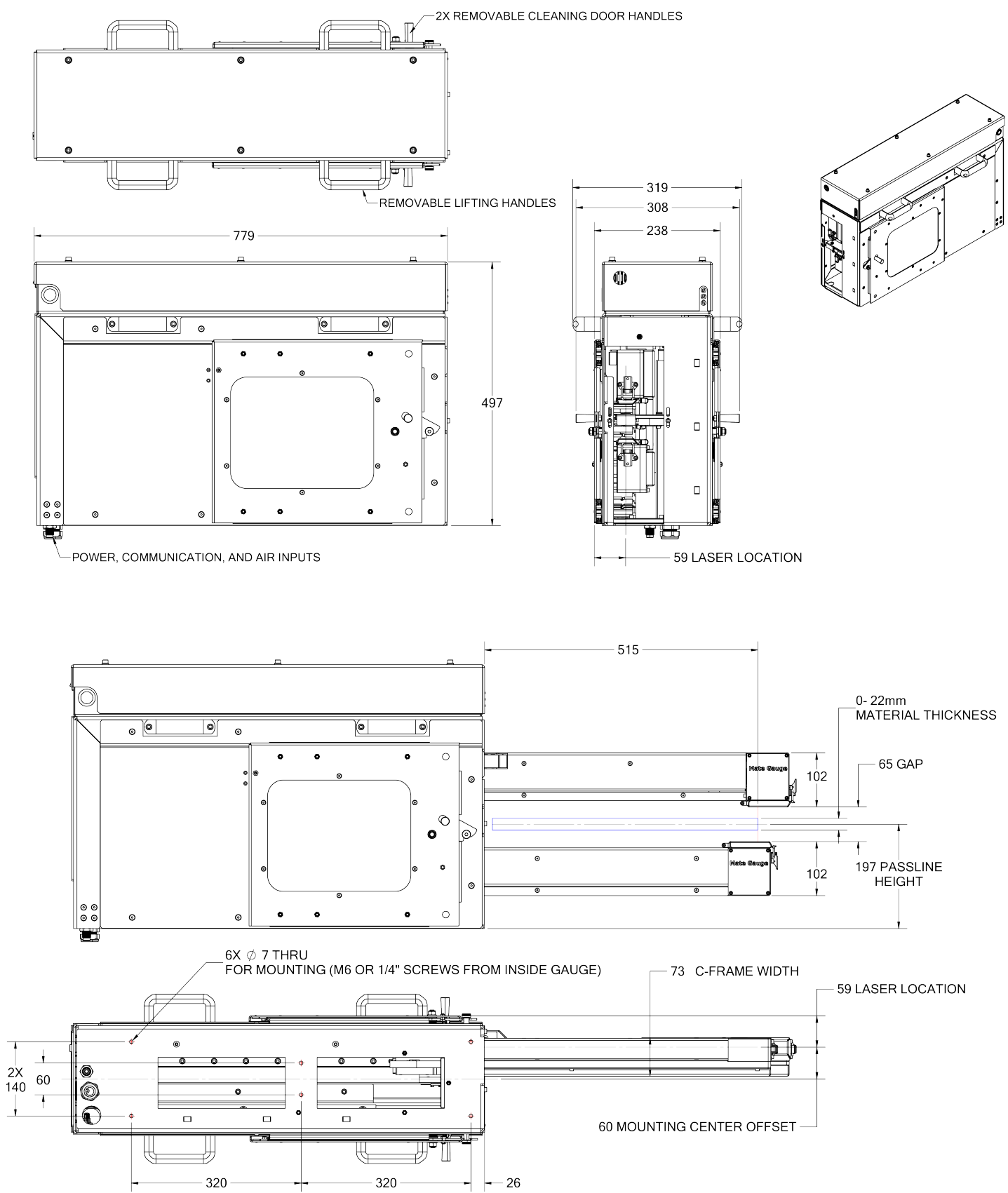
WHAT'S INSIDE THE BOX?

The inline 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, control electronics, and HMI with touchscreen and computing platform.



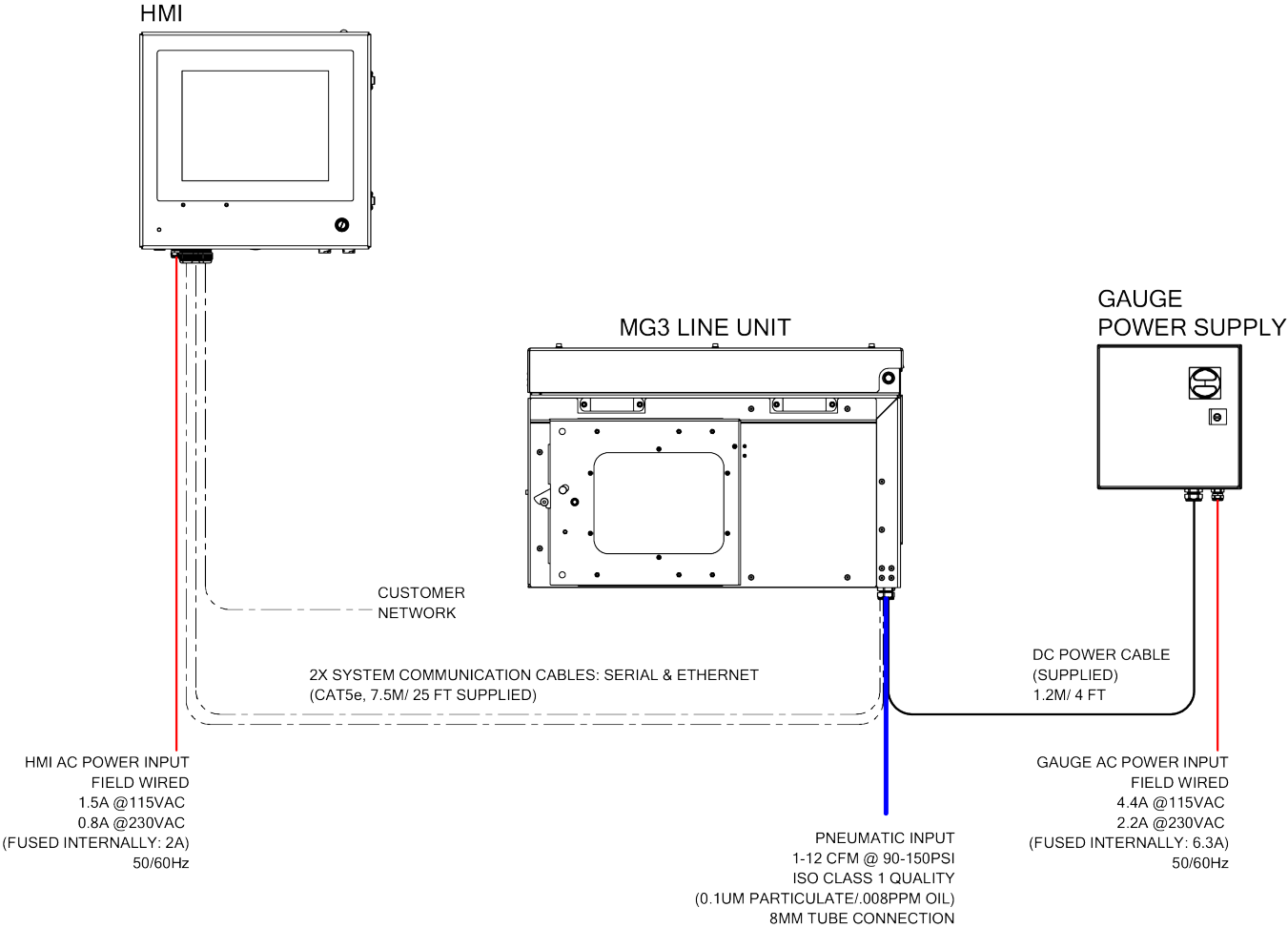
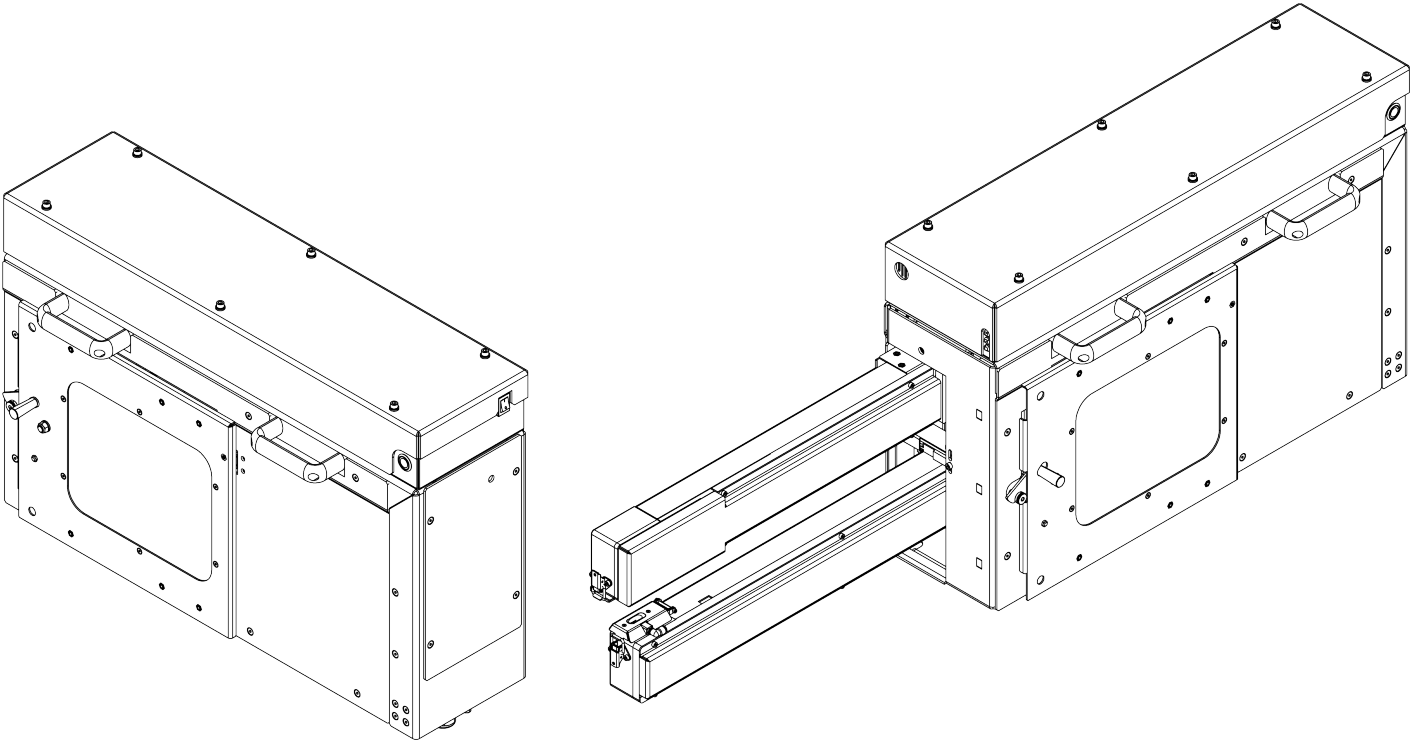
Mate Gauge

MG3

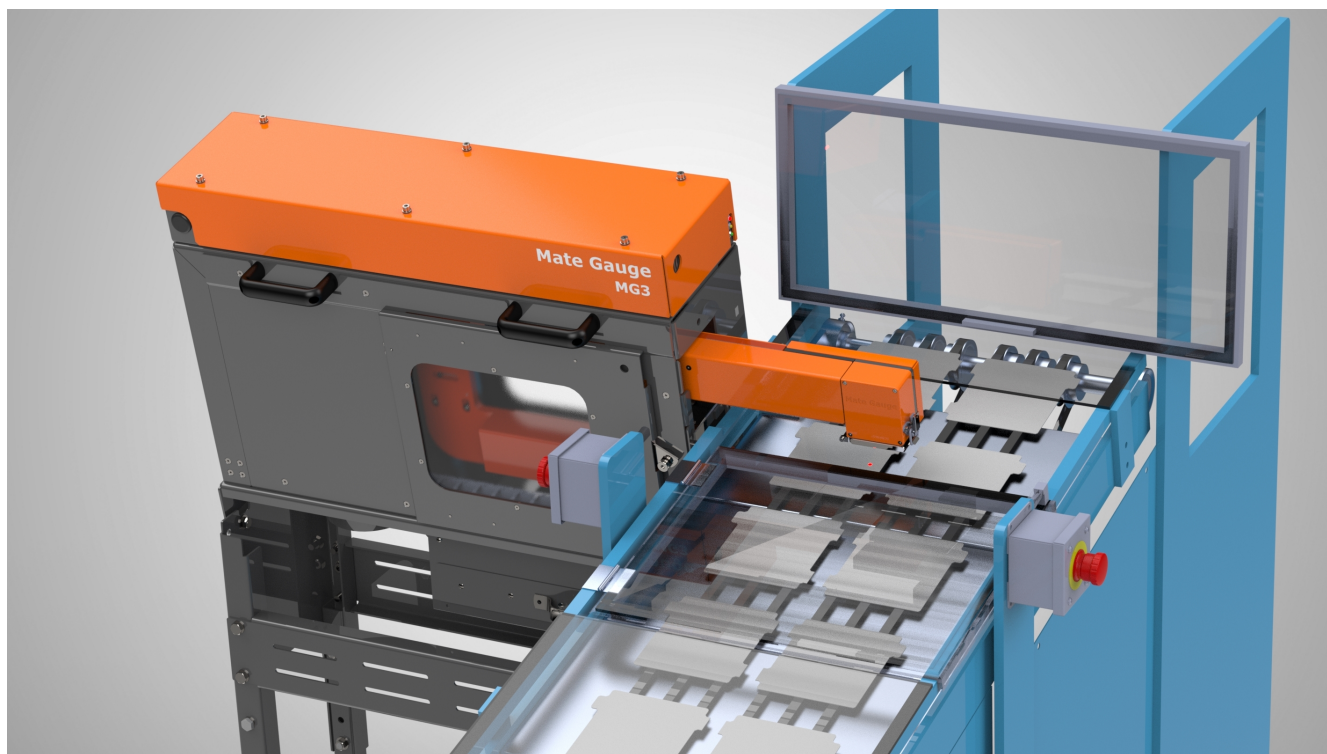


Mate Gauge

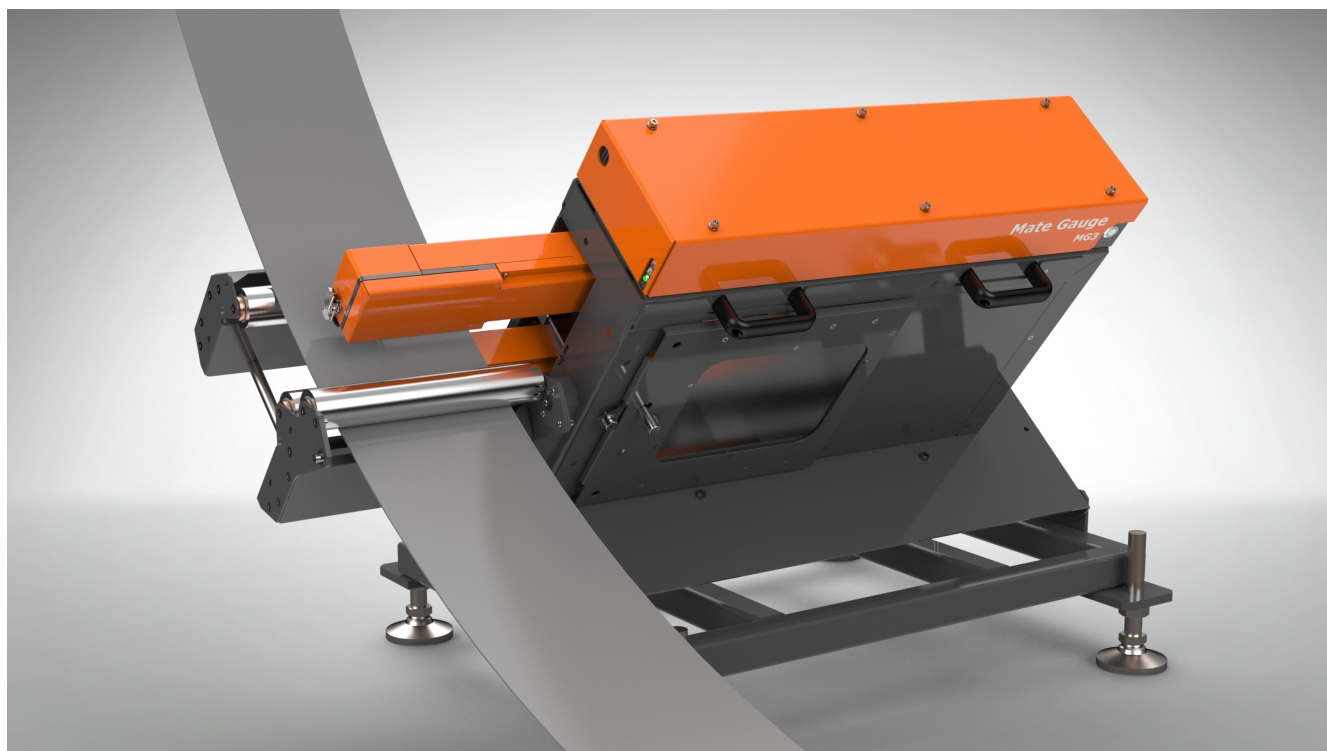
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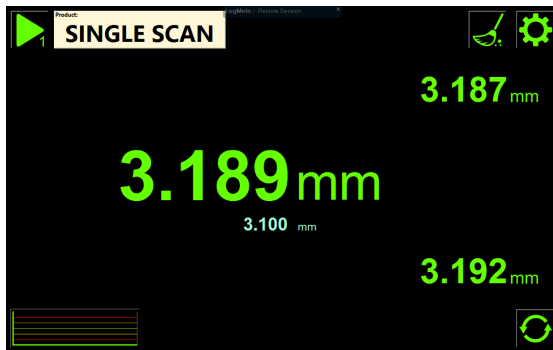
MG3 shown on in-line conveyor.



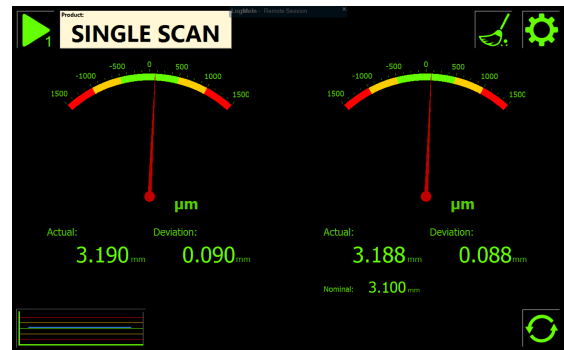
MG3 shown on pasting line.

MG3

Controls and Displays Purpose-Built for Operator Ease



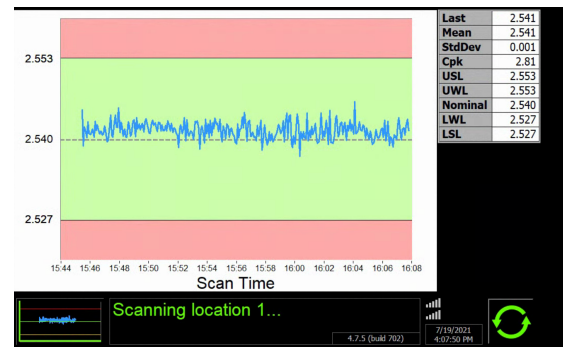
Large Numerical Display.



Needle Gauge Location Showing Left-Right



View Thickness of Sample in a Range of Zones



See Sample Thickness Over Time.

ORDER YOURS TODAY!

Please contact info@mategauge.com and refer to Part No. 10041540

THE MATE GAUGE PRODUCT FAMILY

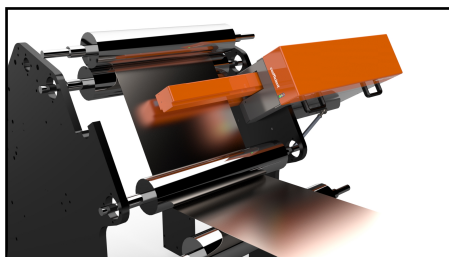
Not sure which Mate Gauge is right for you? Check out our other options.

STANDARD OPTIONS



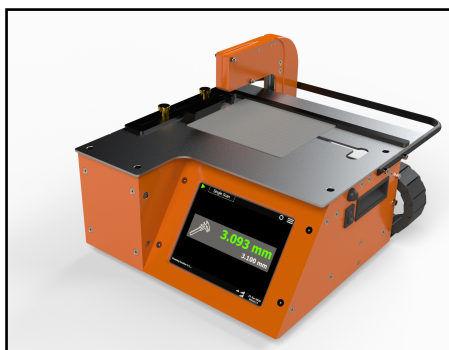
MG1: Compact and lightweight inline gauge. Provides thickness measurement solutions that fit your floorspace and your budget.

[Learn More](#)



MG-CLS: Laser thickness measuring for cast lead strips. Improves lead strip thickness control with automatic measurement.

[Learn More](#)



MGX: Our newest and smallest bench top. Ready to work out-of-the-box, the MGX gives you hands-free accurate measurement results.

[Learn More](#)

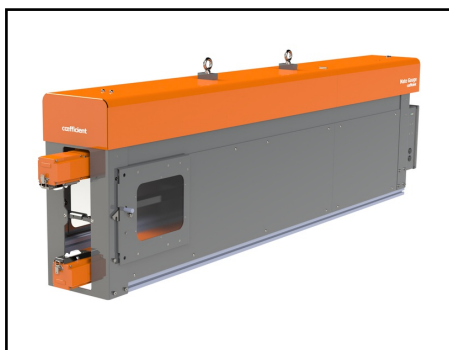
CUSTOM OPTIONS

Have special requirements? No worries. Our team of designers thrives on creating custom solutions to fit every situation.



MG Edge: Powerful features with a compact design. The MG Edge provides near-edge thickness measurement for moving strips.

[Learn More](#)



MGS: No area is out of reach. A large scale thickness scanner designed for wide continuous strip materials.

[Learn More](#)

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