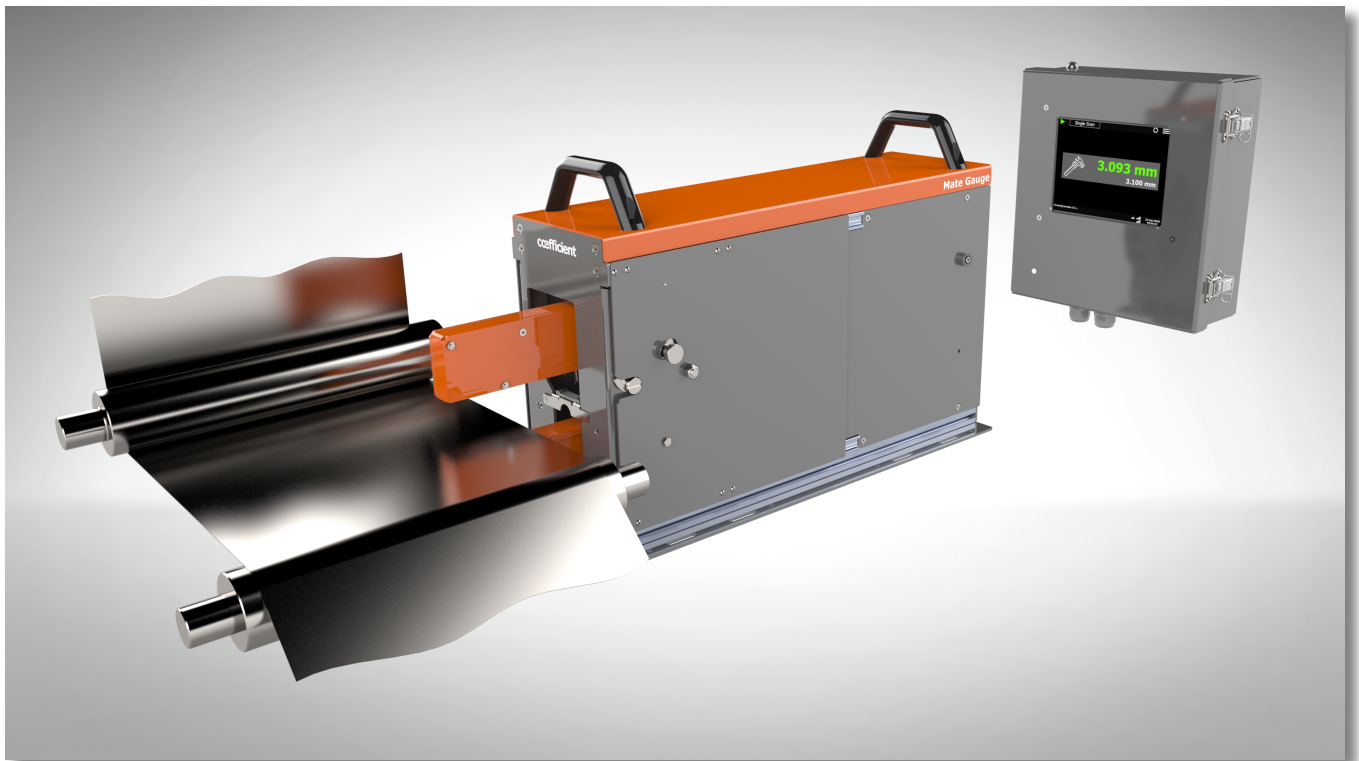


MG1

COMPACT AND LIGHTWEIGHT INLINE MEASUREMENT

Easy to set up and maintain, this affordable solution is ideal for small to mid-sized facilities with limited floor space.



KEY FEATURES

- ✓ NON-CONTACT MEASUREMENT
- ✓ "GAUGE AND GO" MEASUREMENT MODE
- ✓ REMOTE SUPPORT
- ✓ MINIMAL EXTERNAL CABLING
- ✓ EASILY INSTALLED AND MAINTAINED
- ✓ DIRT DETECTION AND ALERT SYSTEM
- ✓ MULTI-PURPOSE DESIGN
- ✓ ON PREMISE WEB APPLICATION
- ✓ DATA LOGGING
- ✓ TOUCHSCREEN DISPLAY
- ✓ NETWORKABLE
- ✓ PLC AND API COMMUNICATIONS AVAILABLE

WHY CHOOSE THE MG1?

- **Laser measurement for unmatched precision:** Laser sensors measure the surfaces of samples as they're being produced. Removes the need to rely on inaccurate hand micrometer measurements and line stoppages to check product quality.
- **Continuous measuring:** Our "gauge and go" continuous measurement system enables operators and managers to monitor thickness during the entire operation. For more detailed thickness measurement data about sections across the sample our "Zones Scan" mode enables operators to monitor thickness of individual sections of the surface.
- **Side to side thickness measurement:** Scanning laser heads measure thickness across the samples thanks to our linear belt actuator. Avoids relying on the edge measurements to control your process.
- **Multi-purpose Design:** The MG1 measures cross-sectional thickness for a wide range of plate and strip materials. Its compact, flexible design means it can be used across a variety of industries and products.
- **PLC connection:** Engineered to blend seamlessly into your production line, the MG1 can connect directly to your PLC. This makes for easy changes in thickness, settings, and scan data. 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 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 facility's 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 ensures 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 conveyors, moving materials and strips, reduces the risk of particulates entering the drive system and eliminates failure points.
- **Compact and lightweight:** Coming in at only 45 pounds, it's easy to move the MG1 to different locations in your production facility.

TECHNICAL SPECIFICATIONS

THICKNESS MEASUREMENTS

Resolution	0.1 µm	[0.000004 in]
Accuracy (typical)	2 µm	[0.00008 in]
Stroke	422 mm	[16.6 in]
Scanning Speed	150 mm/sec	[6 in/sec]
Thickness Range	0 to 8 mm	[0 to 0.3 in]
Measurement Freq.	1 to 5 kHz	

WEIGHT

Complete Assembly	20.4 kg	[45 lbs]
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PHYSICAL DIMENSIONS

Main Housing	550x320x190 mm	[22x13x7 in]
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ENVIRONMENTAL

Operating Temperature	10 °C to 50 °C	[50 °F to 120 °F]
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SUPPLY REQUIREMENTS

Power	4A @ 110V/60 Hz	2A @ 240V/50 Hz	Humidity	< 90%
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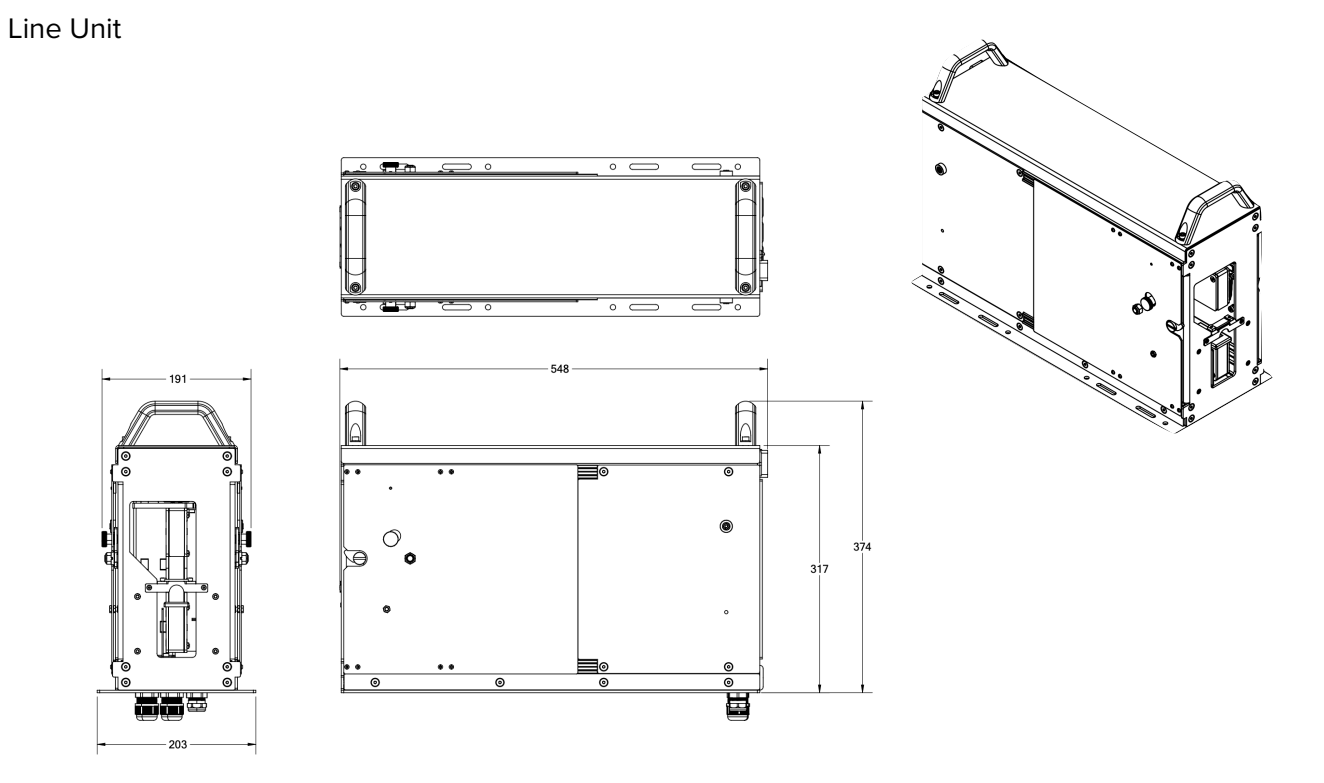
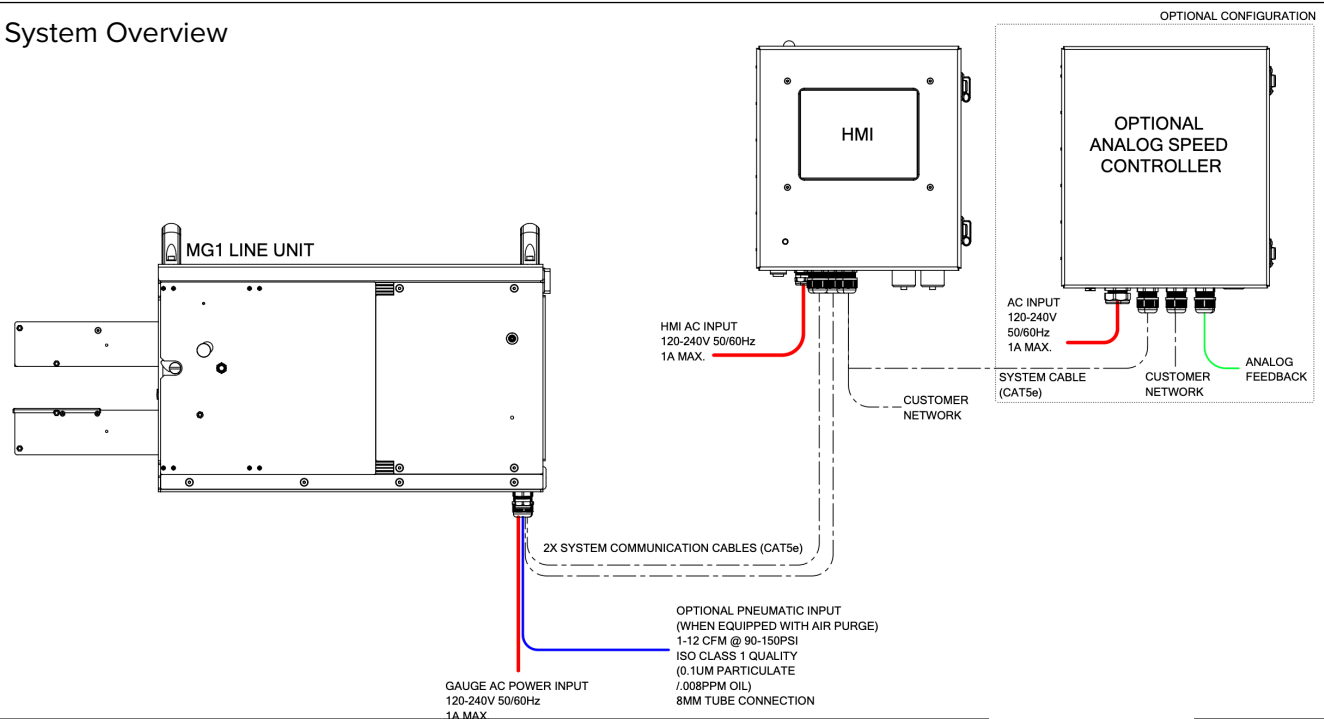
OPTIONAL CONFIGURATIONS

Item	Part Number	Description
1	10041540	MG1 - A Standard Build
2	10041850	MG1 - B Extended Range (0-20 mm)
3	10041851	MG1 - C Extended Range (0-40 mm)

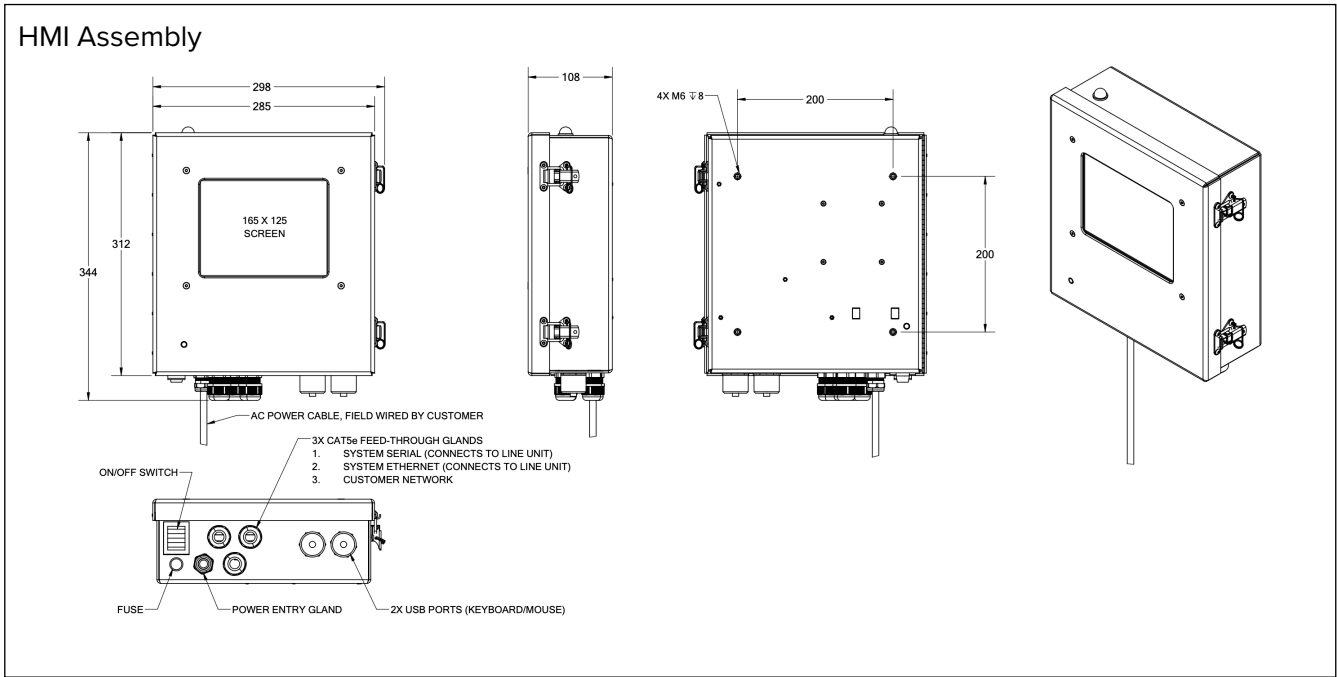
WHAT’S INSIDE THE BOX?

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.

MG1

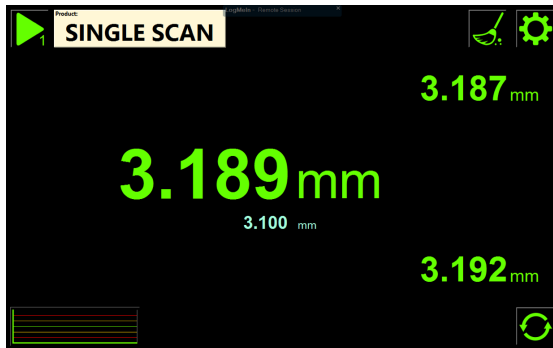


MG1

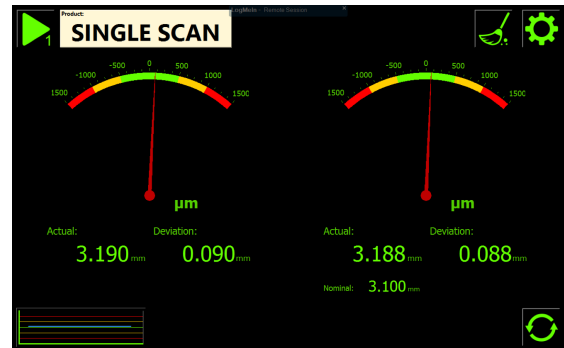


MG1

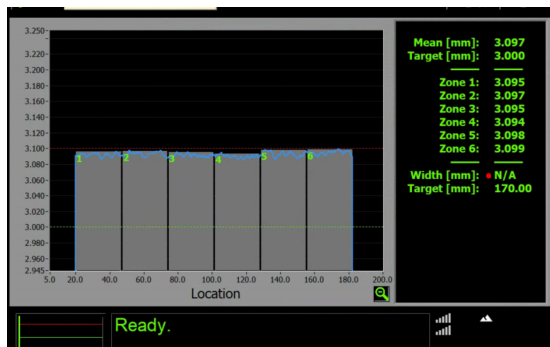
Controls and Displays Purpose-Built for Operator Ease



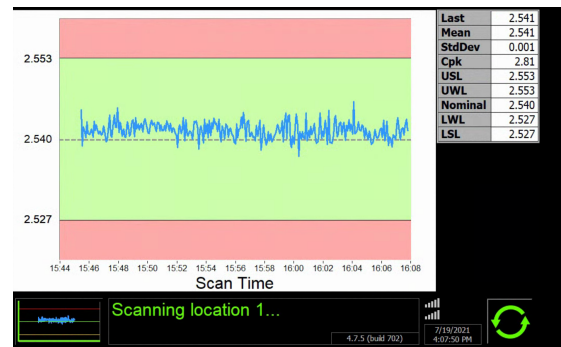
Large Numerical Display



Needle Gauge Location Showing Left-Right Thickness



View Thickness of Sample in a Range of Zones



See Sample Thickness Over Time

ORDER YOURS TODAY!

Please contact info@mategauge.com

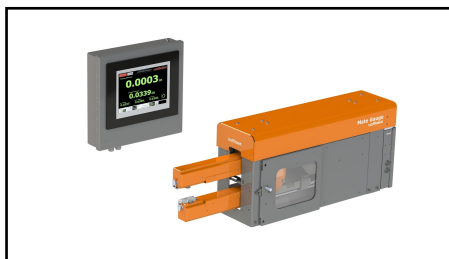
For a standard build, refer to Part No. 10041540

For an extended range build (0-20 mm), refer to Part No. 10041850

For an extended range build (0-40 mm), refer to Part No. 10041851

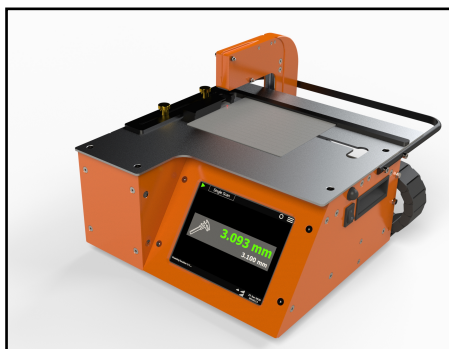
THE MATE GAUGE PRODUCT FAMILY

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



MG3: Our flagship gauge. Tolerant of dirt and temperature swings, the MG3 provides rich data for your inline needs.

[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 SOLUTIONS

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



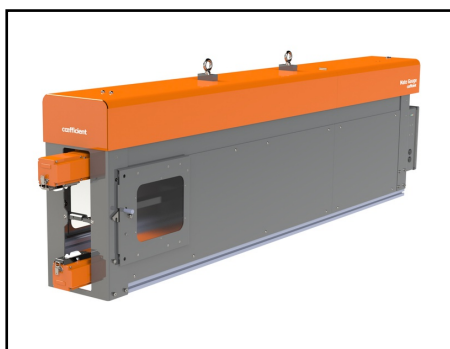
MG-CLS: Laser thickness measuring for cast lead strips. Improves lead strip thickness control with automatic measurement.

[Learn More](#)



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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