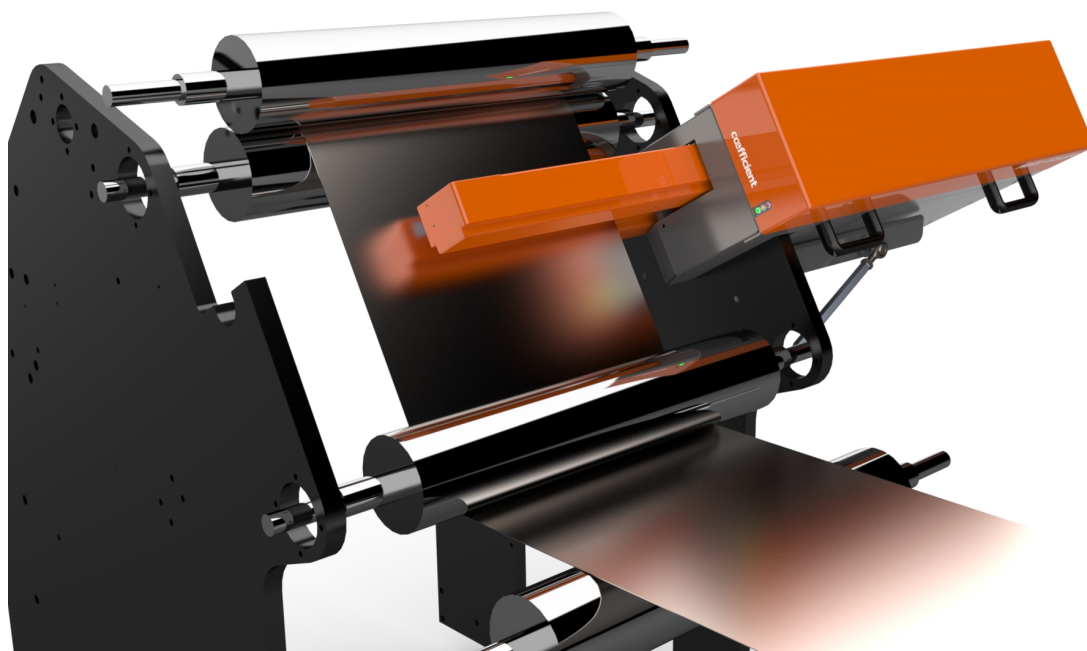


MG-CLS

LASER THICKNESS MEASUREMENT FOR CAST LEAD STRIP

Improves lead strip thickness control with automatic measurement and eliminates operator hand-measuring



KEY FEATURES

- ✓ NON-CONTACT MEASUREMENT
- ✓ "GAUGE AND GO" MEASUREMENT MODE
- ✓ REMOTE SUPPORT
- ✓ MINIMAL EXTERNAL CABLING
- ✓ EASILY INSTALLED AND MAINTAINED
- ✓ DIRT DETECTION AND ALERT SYSTEM
- ✓ DESIGNED FOR TBS LEAD STRIP CASTING MACHINES
- ✓ CLOSED-LOOP SLITTER CONTROL
- ✓ DATA LOGGING
- ✓ TOUCHSCREEN DISPLAY
- ✓ NETWORKABLE
- ✓ TEMPERATURE FLUCTUATION CONTROL
- ✓ ON PREMISE WEB APPLICATION

WHY CHOOSE THE MG-CLS?

- **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 throughout the coil:** Our “gauge and go” continuous measurement system enables operators and managers to monitor coil 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:** The optional closed-loop slitter control makes automatic machine adjustments to achieve and maintain strip thickness. Both PLC and analog integration available. The system speeds up the slitter drive if the strip is too thick and slows it down if the strip is too thin. It's like an ideal operator constantly taking accurate measurements and instantly making speed adjustments to improve strip 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 | 520 mm | [20.46 in] |
| Scanning Speed | 150 mm/sec | [6 in/sec] |
| Thickness Range | 0 to 8 mm | [0 to 0.3 in] |
| Measurement Frequency | 1 to 5 kHz | |

SUPPLY REQUIREMENTS

| | |
|-------|---------------------------------|
| Power | 4A @ 110V/60 Hz 2A @ 240V/50 Hz |
|-------|---------------------------------|

WEIGHT

| | | |
|-------------------|-------|----------|
| Complete Assembly | 38 kg | [84 lbs] |
|-------------------|-------|----------|

PHYSICAL DIMENSIONS

| | | |
|--------------|----------------|--------------|
| Main Housing | 740x530x210 mm | [29x20x8 in] |
|--------------|----------------|--------------|

ENVIRONMENTAL REQUIREMENTS

| | | |
|-----------------------|----------------|-------------------|
| Operating Temperature | 10 °C to 50 °C | [50 °F to 120 °F] |
|-----------------------|----------------|-------------------|

| | |
|----------|-------|
| Humidity | < 90% |
|----------|-------|

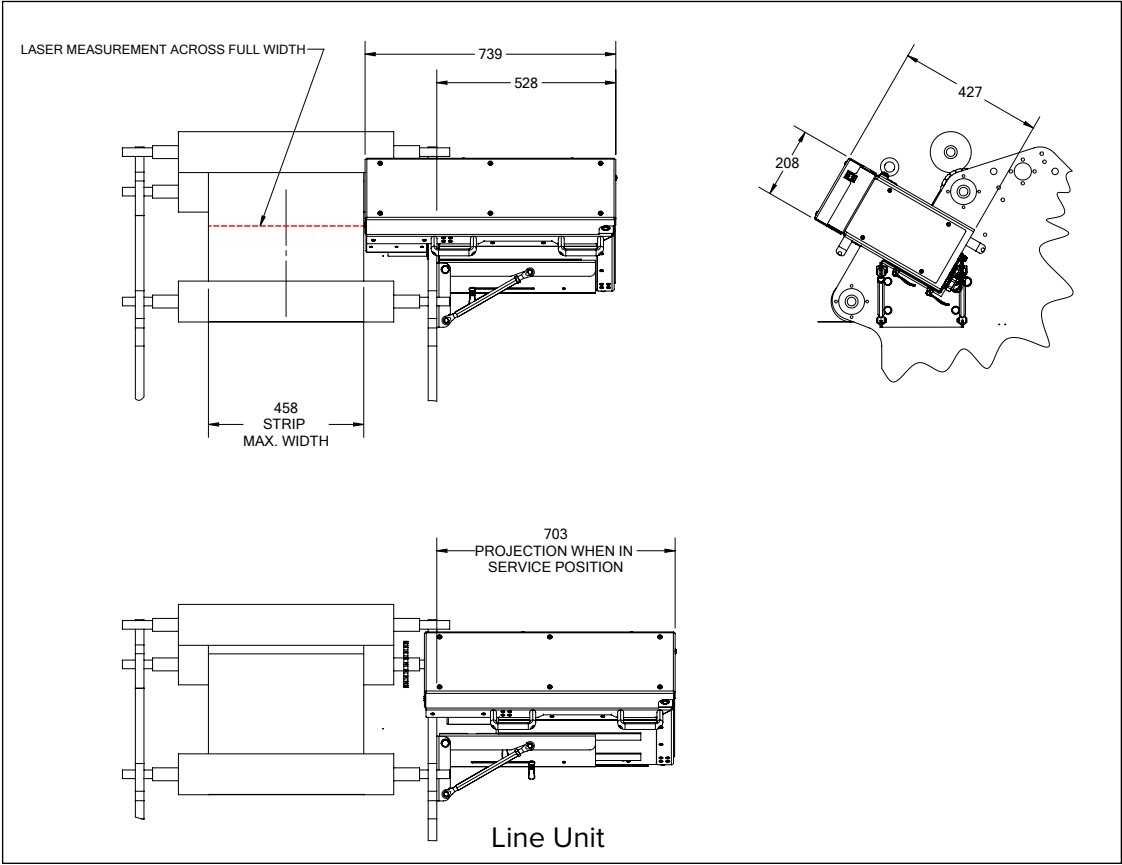
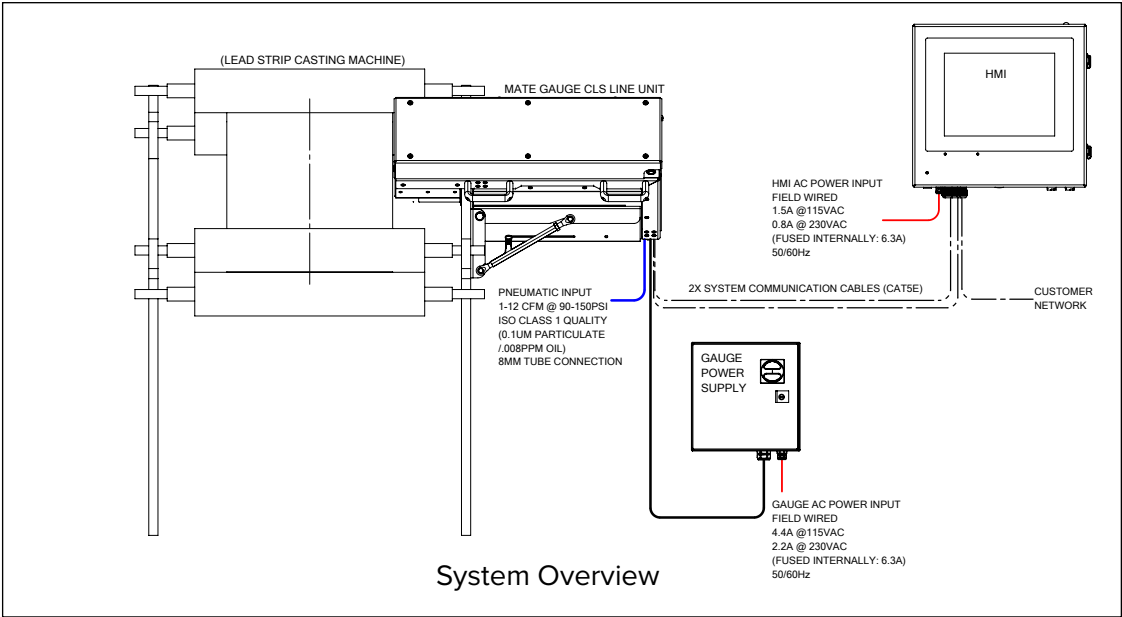
PART NUMBER

| Item | Part Number | Description |
|------|-------------|-------------------------|
| 1 | 10041500 | General Assembly MG-CLS |

WHAT’S INSIDE THE BOX?

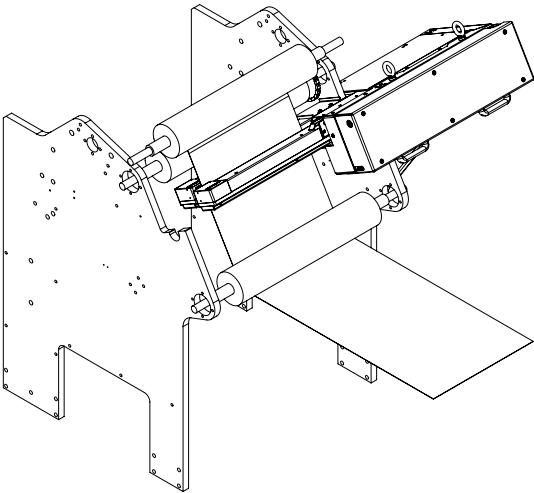
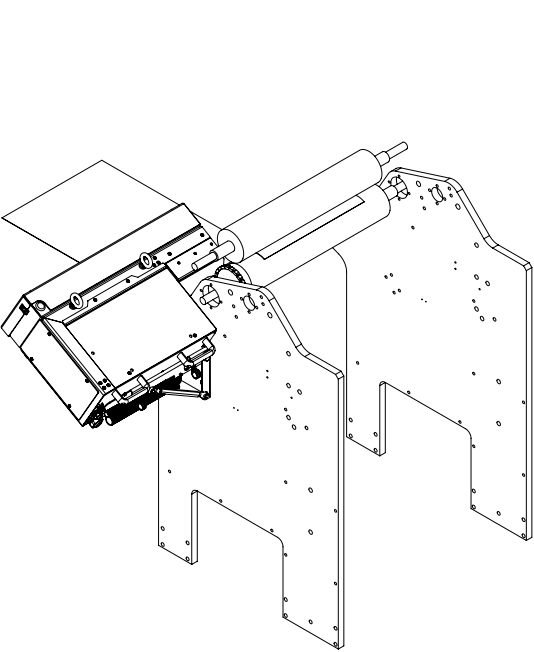
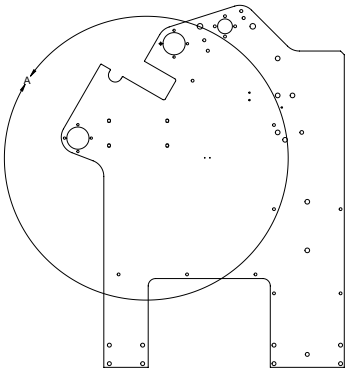
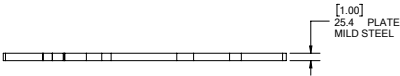
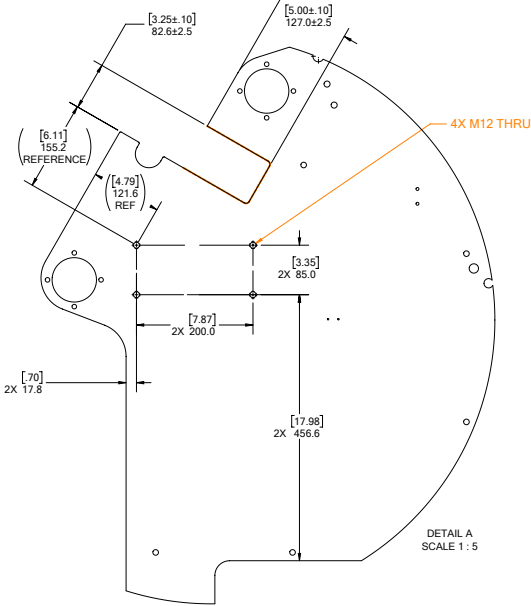
The inline system is ready to run out-of-the-box. It includes two laser sensors, c-frame, scanning belt drive system, NIST traceable calibration reference block, control electronics, and HMI with touchscreen and computing platform.

MG-CLS



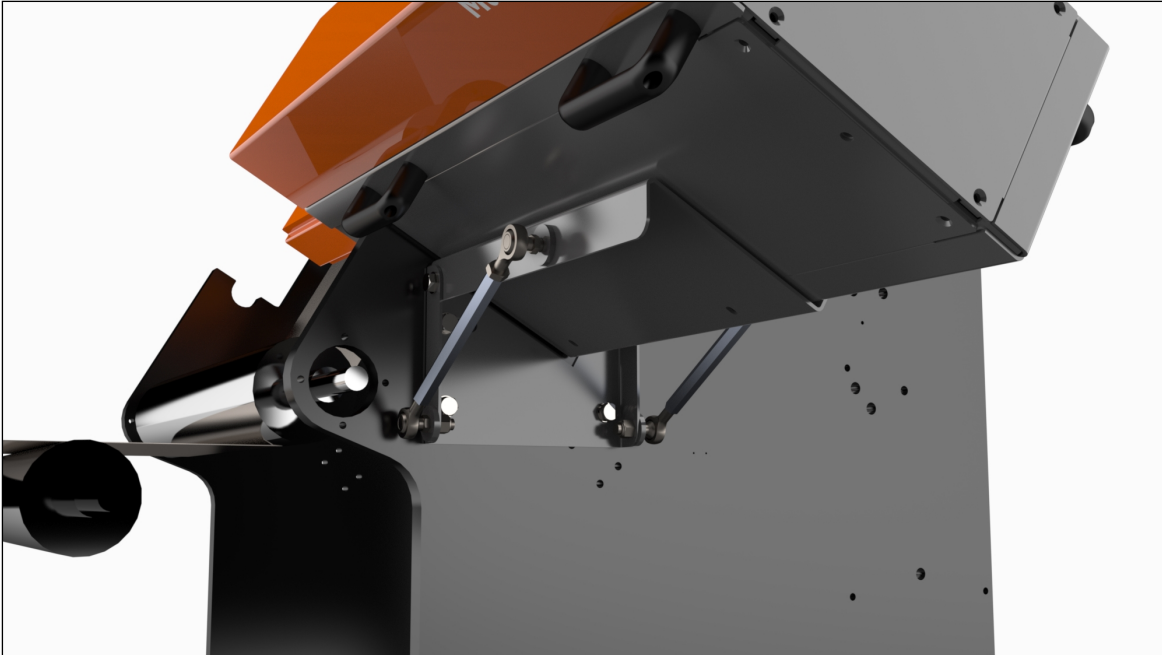
MG-CLS

- NOTES:
- 1. MODIFY NON-OPERATOR SIDE PLATE AS SHOWN BELOW:
 - 2. **ADD FEATURES:** CUT NOTCH (ORANGE LINE = CUTTING LINE), ADD 4X TAPPED HOLES.
 - 3. DIMENSIONS ARE [IN] mm
 - 4. HOLE LOCATION DIMENSIONS +/- 1MM/ .040"



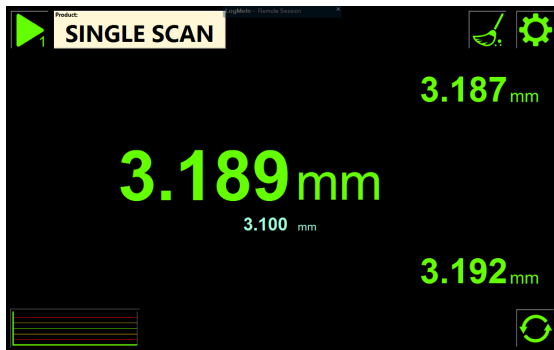
Mate Gauge

MG-CLS

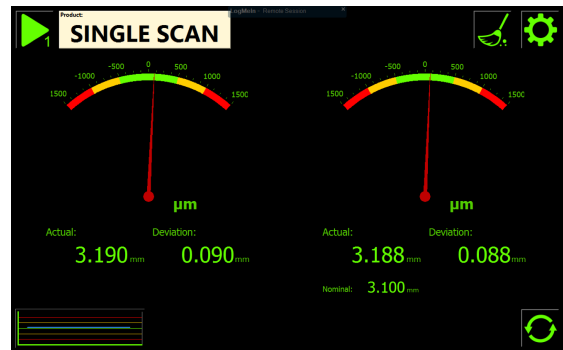


MG-CLS

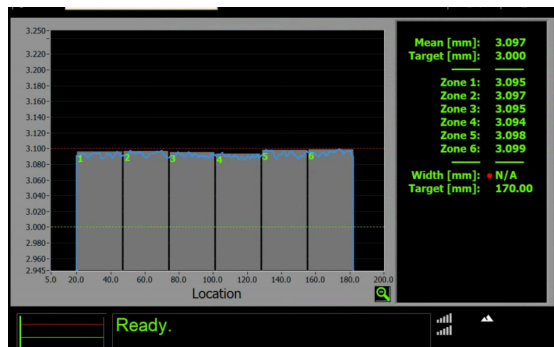
Controls and Displays Purpose-Built for Operator Ease



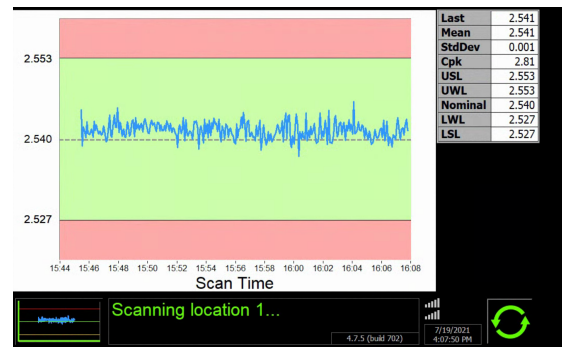
Large Numerical Display.



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

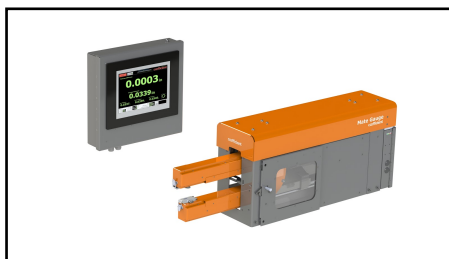
Not sure which Mate Gauge is right for you? Check out our other options.

STANDARD OPTIONS



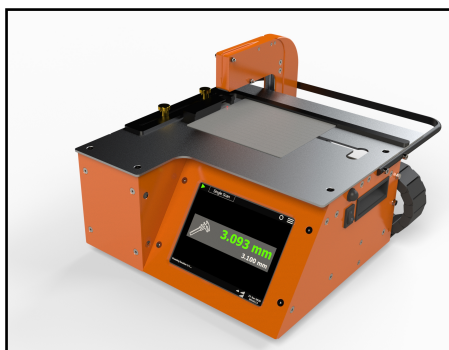
MG1: Compact and lightweight inline gauge. Provides thickness measurement solutions that fit your floorspace and your budget.

[Learn More](#)



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](#)

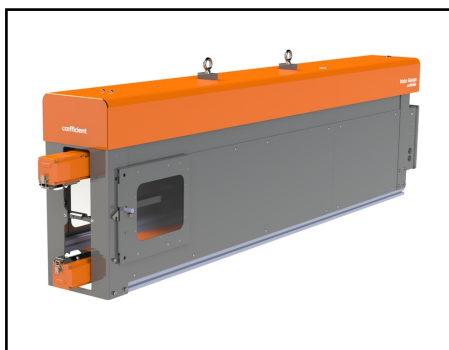
CUSTOM OPTIONS

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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