MG-CLS

Laser Thickness Measurement for Cast Lead Strip



Non-contact measurement
Full strip profile displayed
"Gauge and Go" measurement
mode
Touchscreen display

Easily installed and maintained Closed-loop slitter control Networkable Remote support Data logging



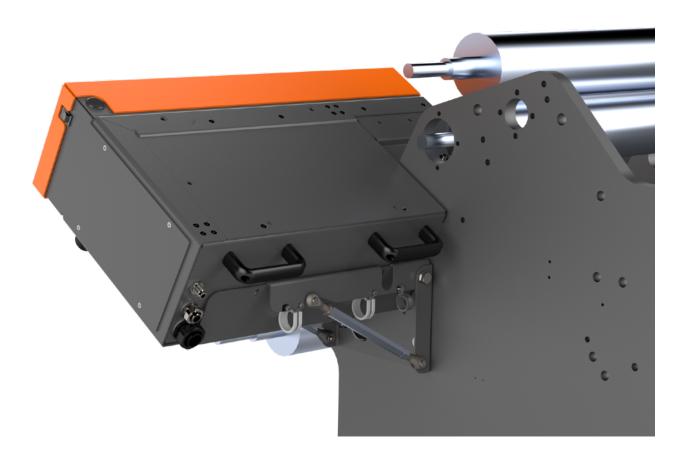
Contact us for more info or to order an MG-CLS

Go flat out with 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 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 process 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



MG-CLS Technical Specifications

THICKNESS MEASUREMENTS DETAILS

Resolution	0.5 <i>μ</i> m	[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

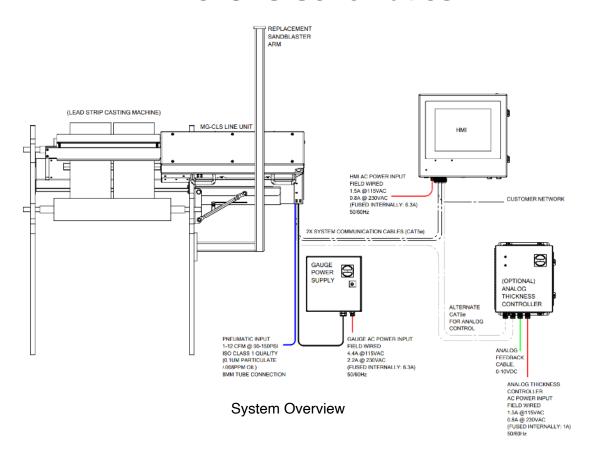
Humidity < 90%

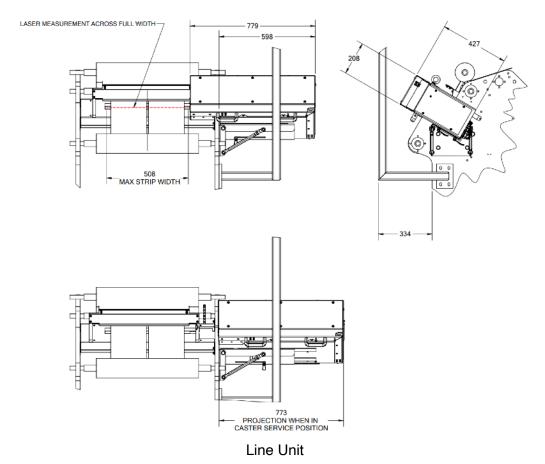
PART NUMBER

Item	Part Number	Description
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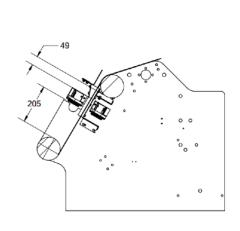
1 10041500 General Assembly MG-CLS

MG-CLS Schematics

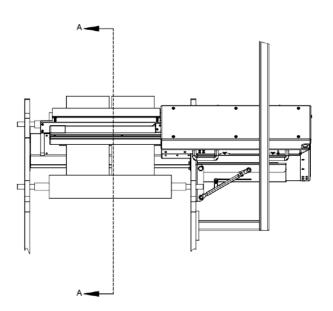


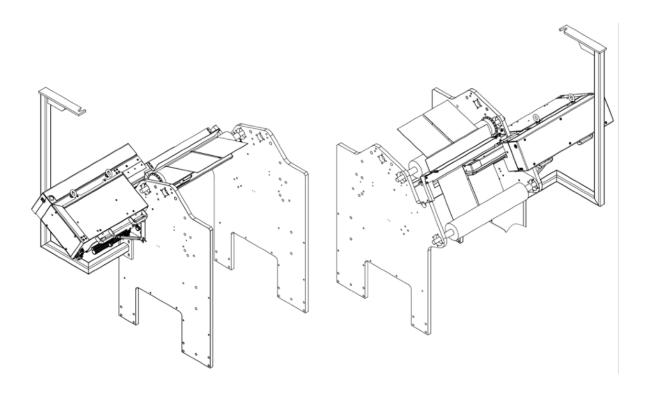


MG-CLS Schematics



SECTION A-A SENSOR-TO-ROLLER CLEARANCES, TYPICAL ALL DIMENSIONS +/-5MM





MG-CLS Controls and Displays

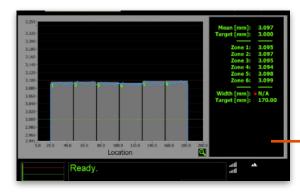
Purpose-built for operator ease



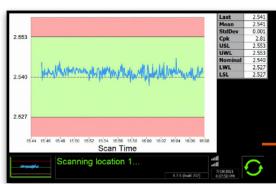
Large numerical display



Needle gauge location showing left-right thickness



View thickness of sample in a range of zones



See sample thickness over time

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



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

Ready out of the box

The MGX is our newest and smallest bench top that gives you hands-free measurements.

Learn more



