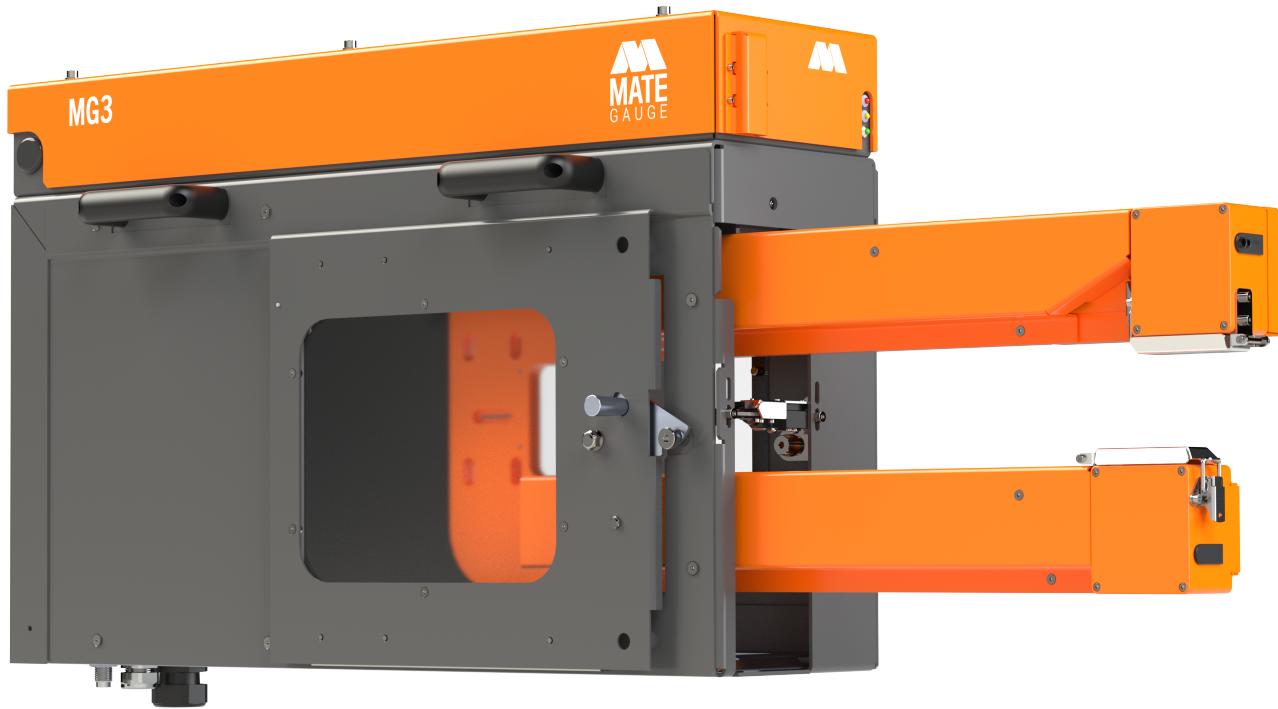


# MG3

Robust. Connected. Complete. And smart.



Non-contact measurement  
Full strip profile displayed  
Active thermal control  
Touchscreen display  
Easily installed and maintained

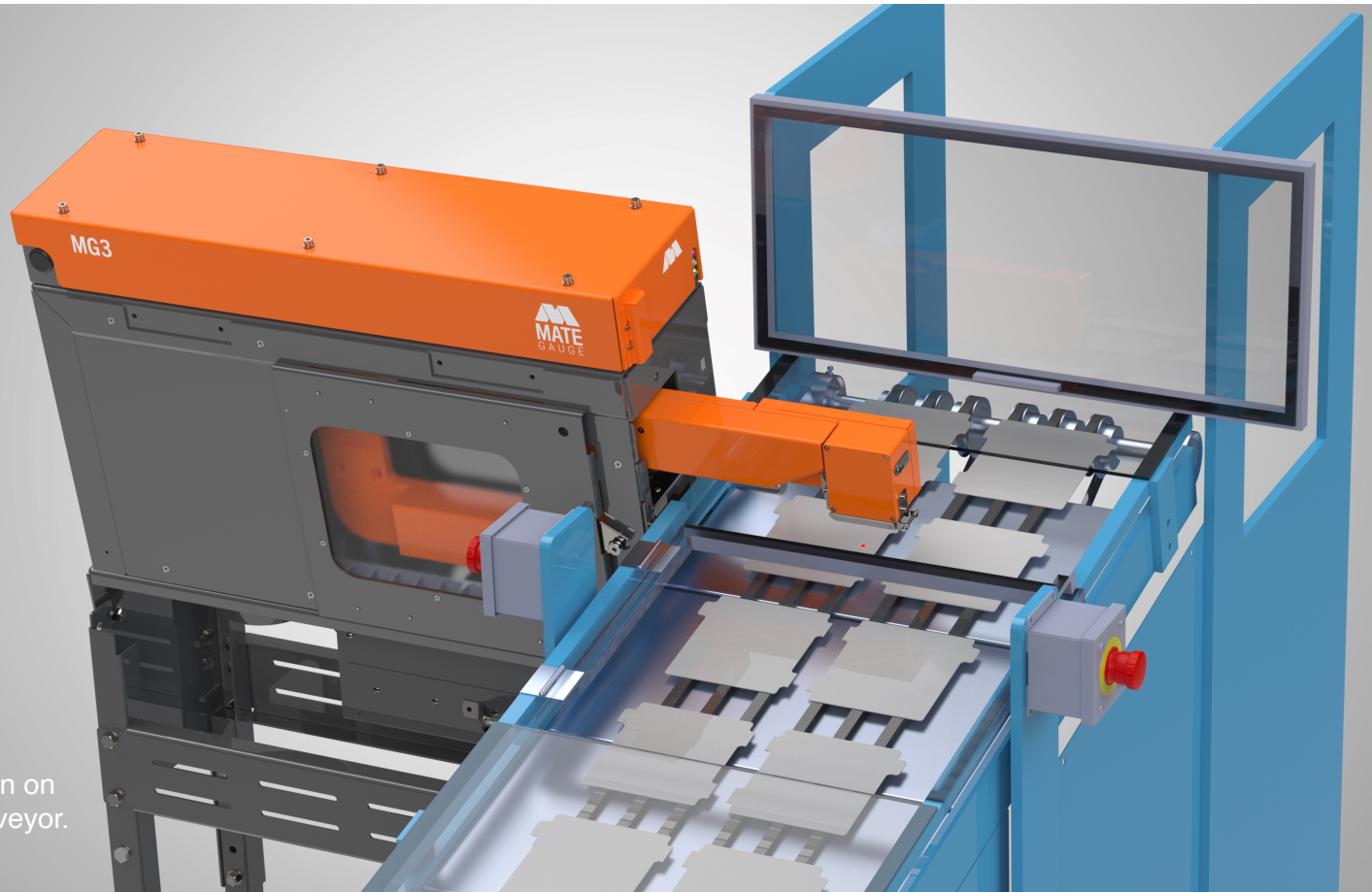
Networkable  
Remote support  
Data logging



**Contact us for more info or to order an MG3**

[info@mategauge.com](mailto:info@mategauge.com)

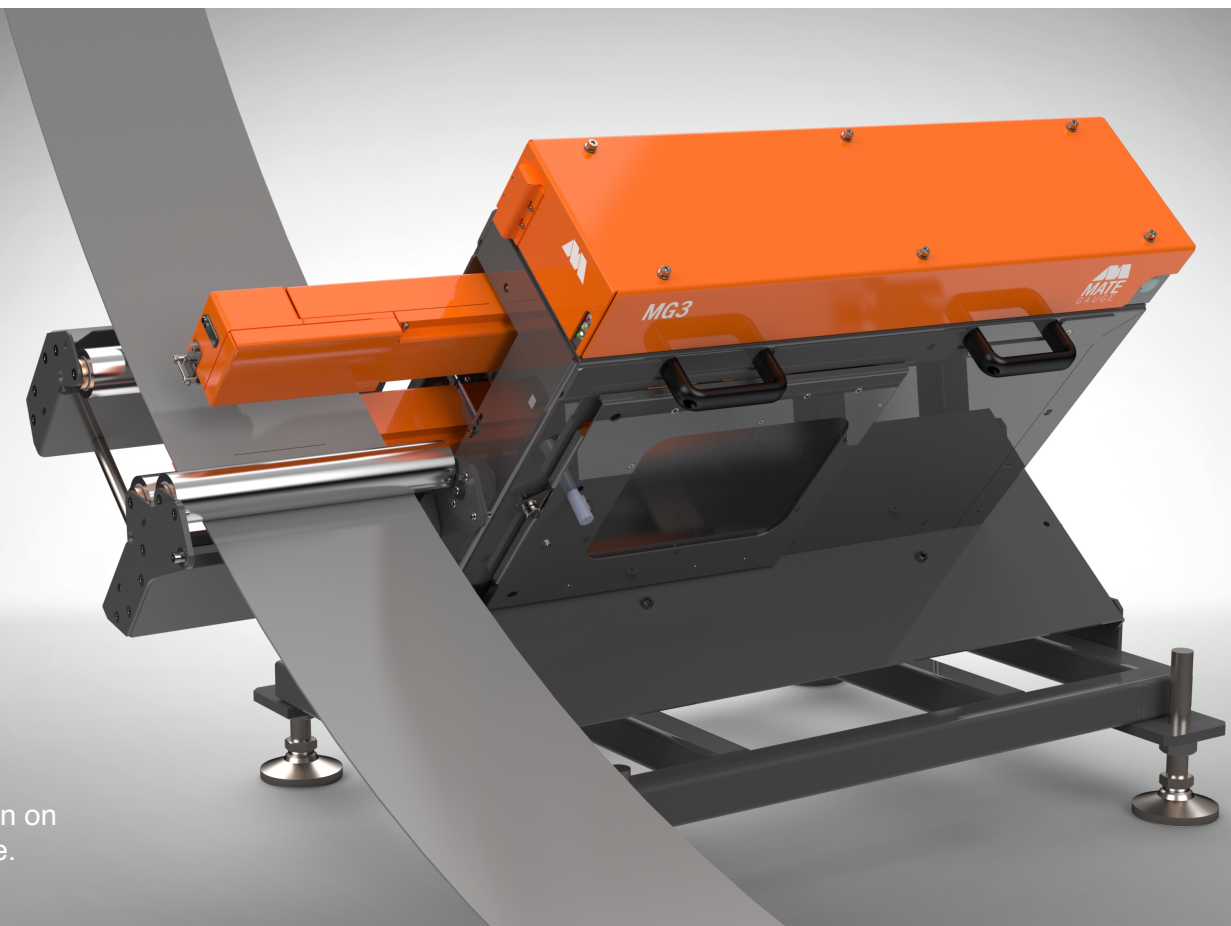
# Go flat out with the MG3



MG3 shown on in-line conveyor.

- **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



MG3 shown on  
pasting line.

# MG3 Technical Specifications

## THICKNESS MEASUREMENTS DETAILS

Resolution	0.5 $\mu\text{m}$	[0.00002 in]
Accuracy (typical)	4 $\mu\text{m}$	[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/ 2.2A@230V	1.5A@115V 0.75A@230V

## WEIGHT

Complete Assembly	49 kg	[108 lbs]
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## PHYSICAL DIMENSIONS

Main Housing	798x506x238 mm	[31x20x9 in]
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## ENVIRONMENTAL REQUIREMENTS

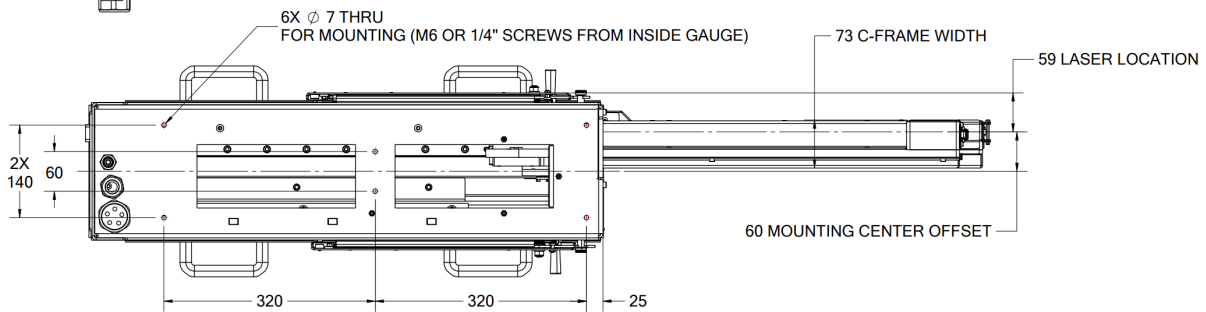
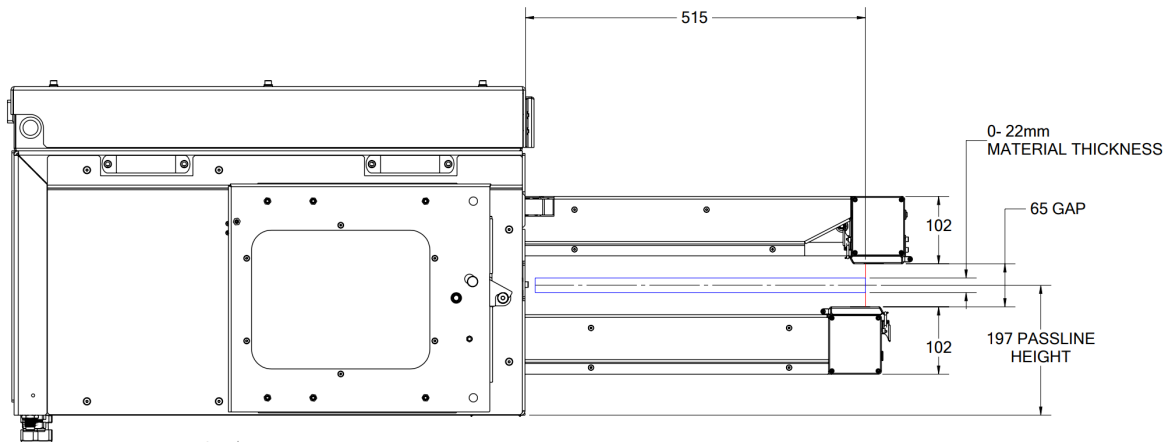
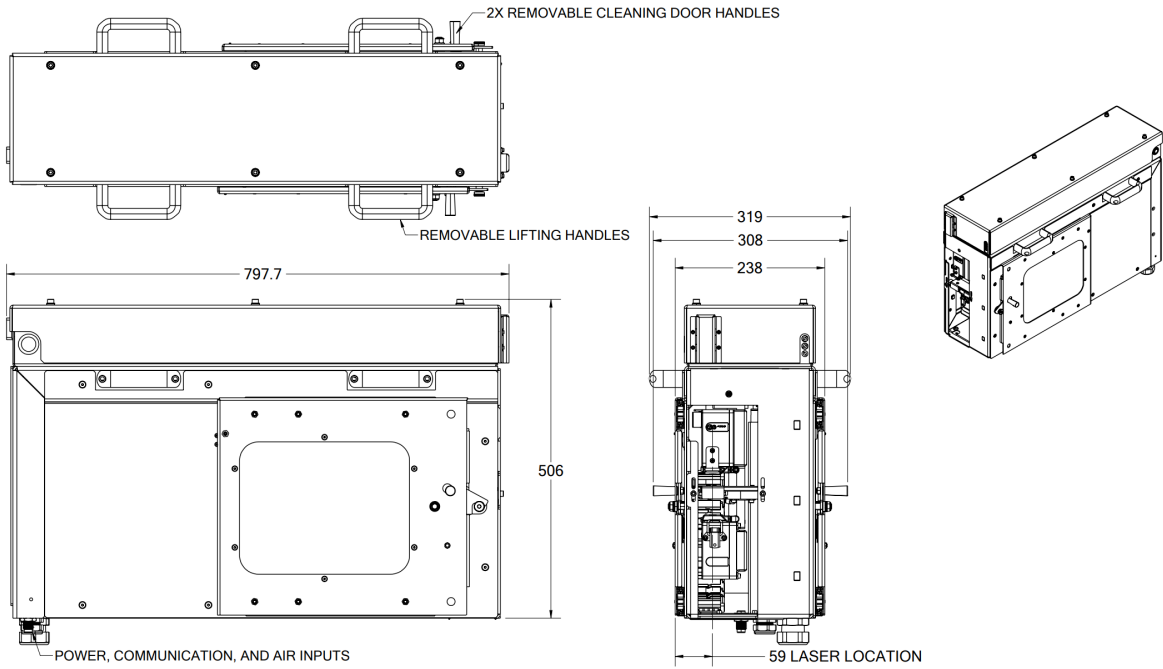
Operating Temperature	10 °C to 50 °C	[50 °F to 120 °F]
Humidity	< 90%	

## PART NUMBER

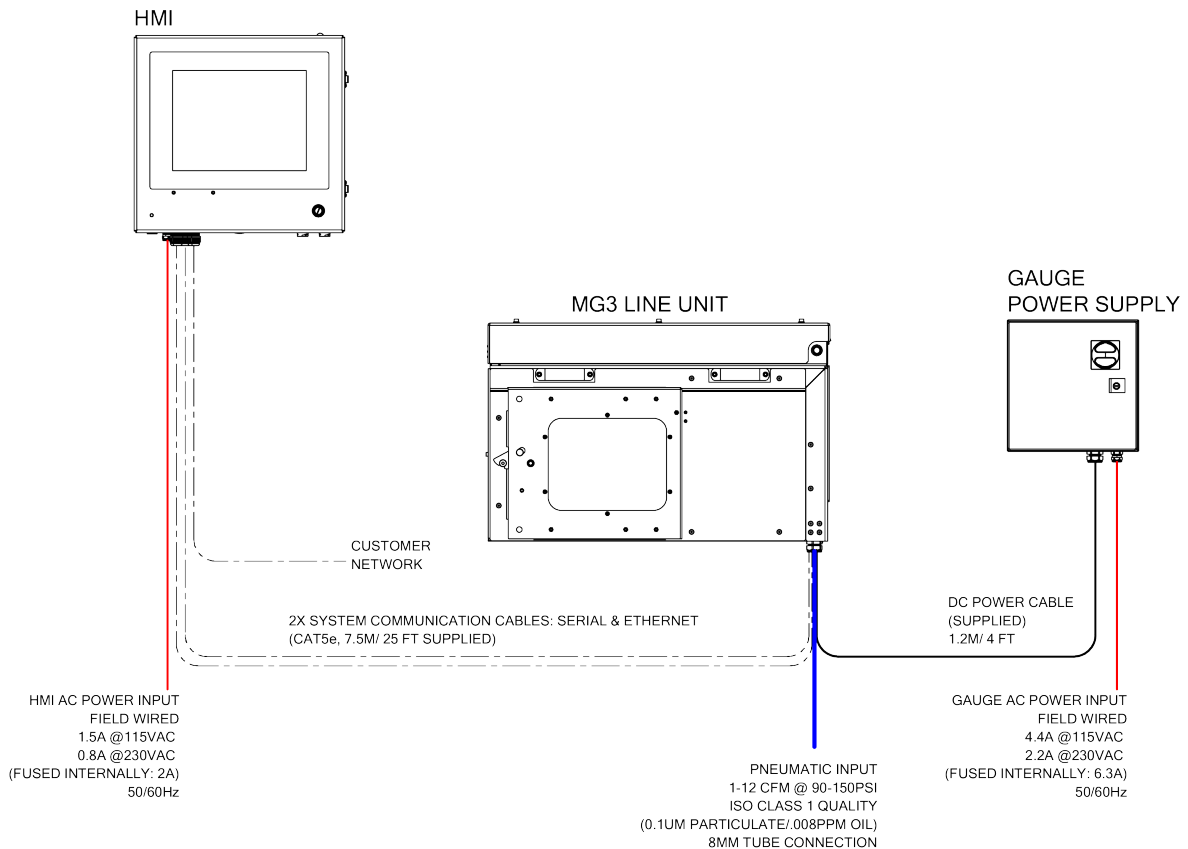
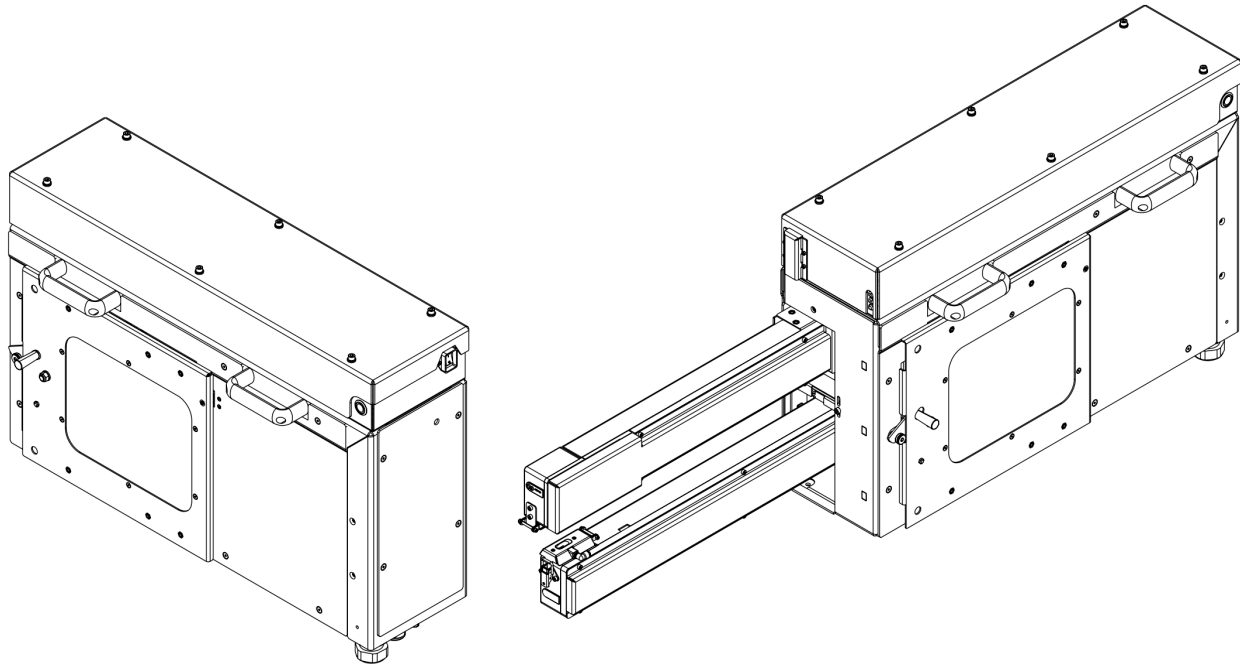
Item	Part Number	Description
1	10042215	MG3 Standard System



# MG3 Schematics

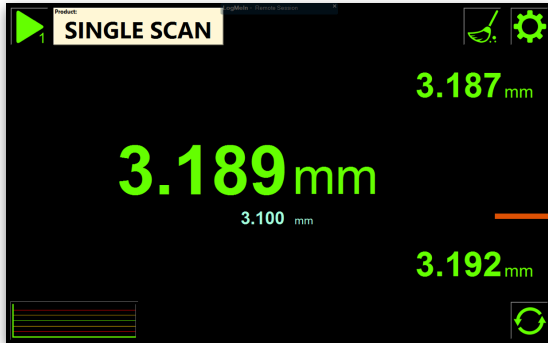


# MG3 Schematics

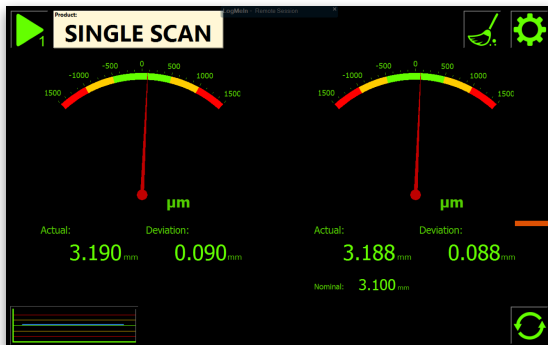


# MG3 Controls and Displays

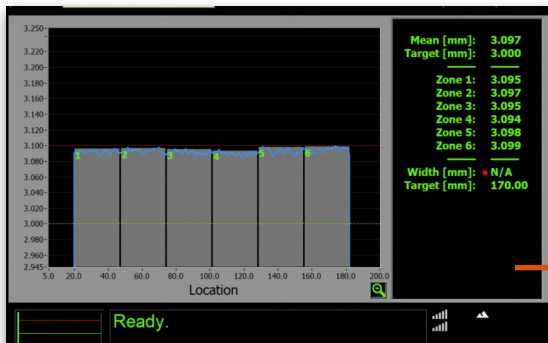
Purpose-built for operator ease



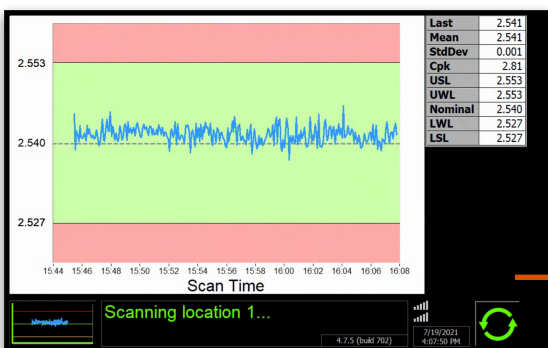
Large numerical display



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.

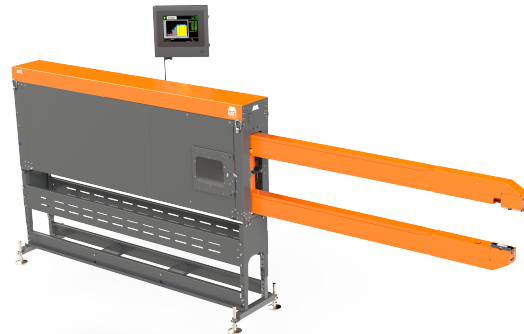
The MG1 provides thickness measurement solutions that fit your floorspace and budget.

[Learn more](#)

## No area is out of reach

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

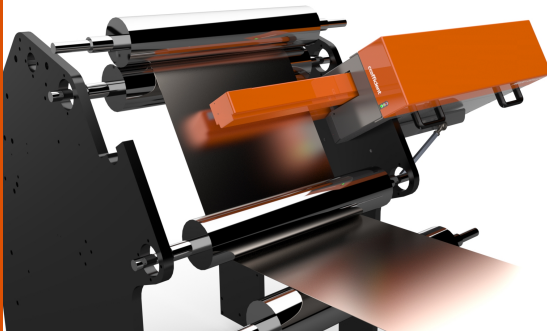
[Learn more](#)



## For cast lead strips

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

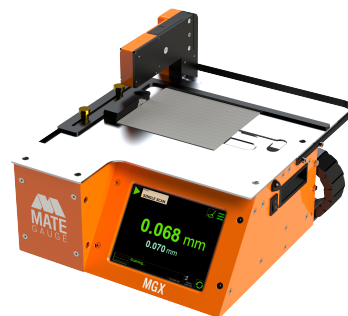
[Learn more](#)



## Ready out of the box

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

[Learn more](#)



**Your complete thickness measurement system**