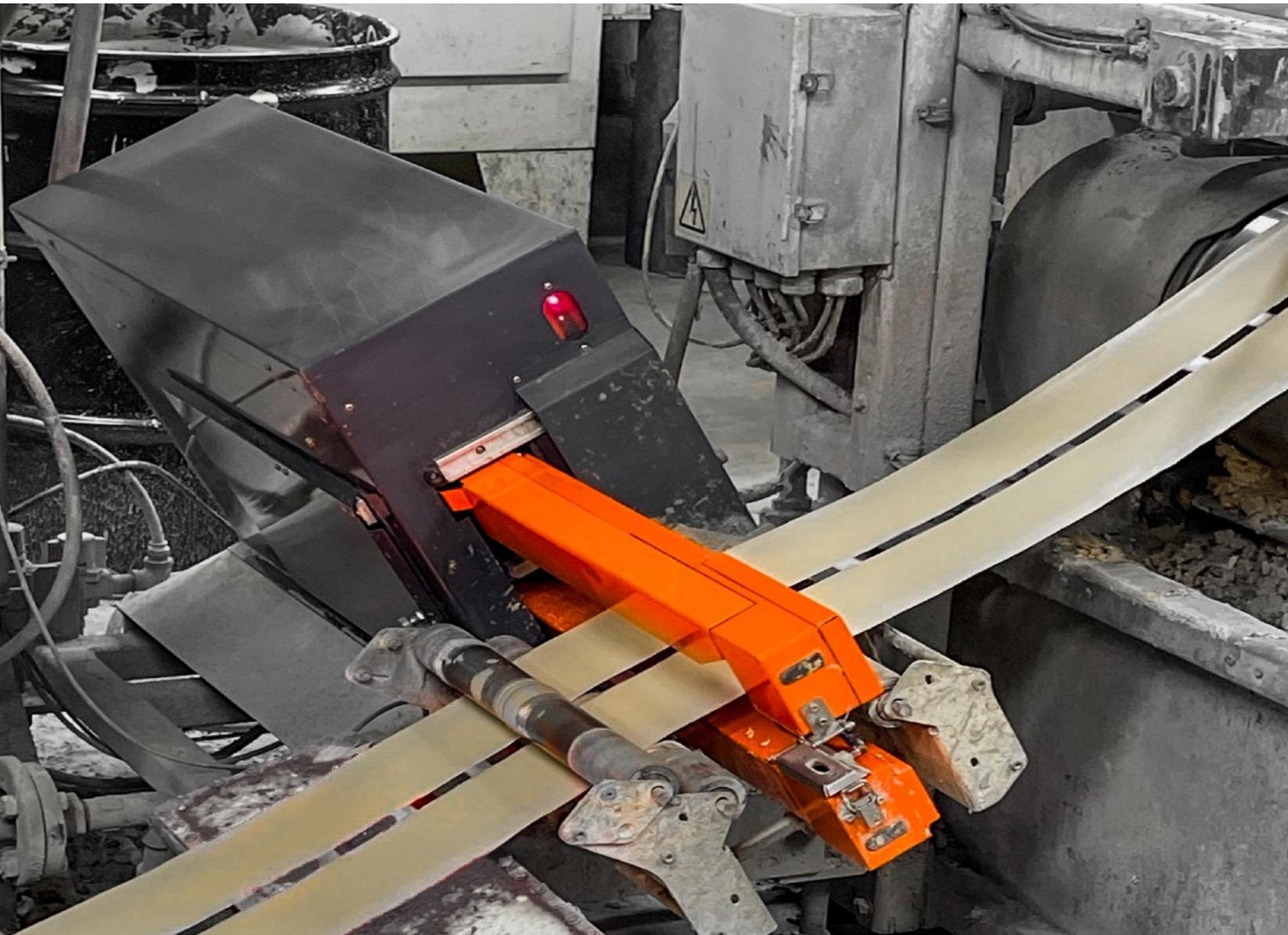




Mate Gauge for Lead Pasting Lines

Thickness Monitoring for Battery Plants



Ready-to-Install Packages for Lead Pasting Lines

Mate Gauge provides a ready-to-install, non-contact laser thickness measurement solution designed for pasting lines.

Whether installed on the wet side, dry side, or at the stacker, the MG3 system ensures continuous thickness control, reducing process variability and optimizing battery performance.

Our packages are designed to minimize downtime and maximize yield. By providing a **complete solution –including the MG3 gauge, stand, protective cover, and expert commissioning support** – Mate Gauge ensures a seamless integration into your production environment.



Table of Contents

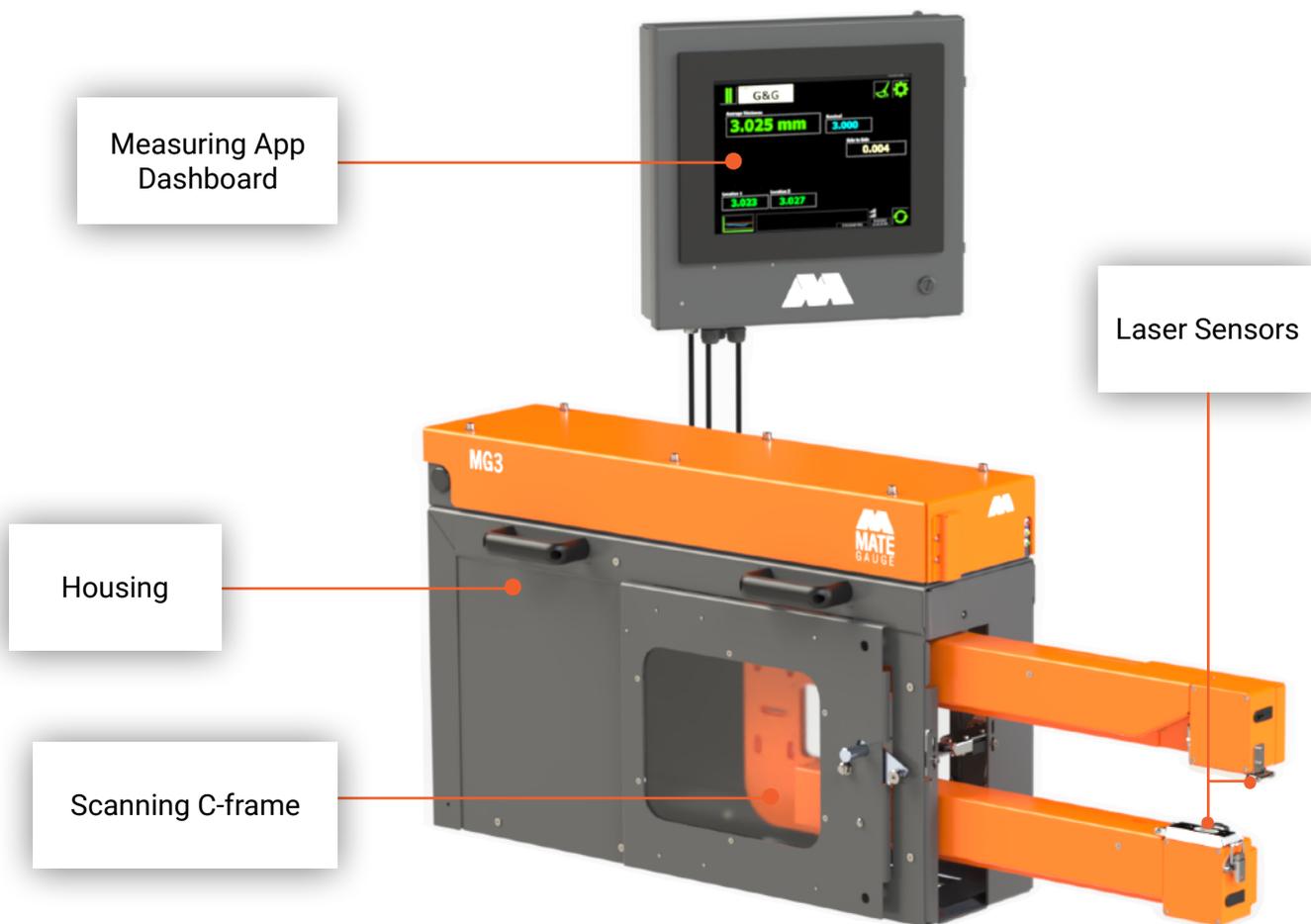
- 01** MG3 Overview
- 02** Installation Options
- 03** Technical Specifications
- 04** Accessories
- 05** Software
- 06** Commissioning

PACKAGE OPTIONS

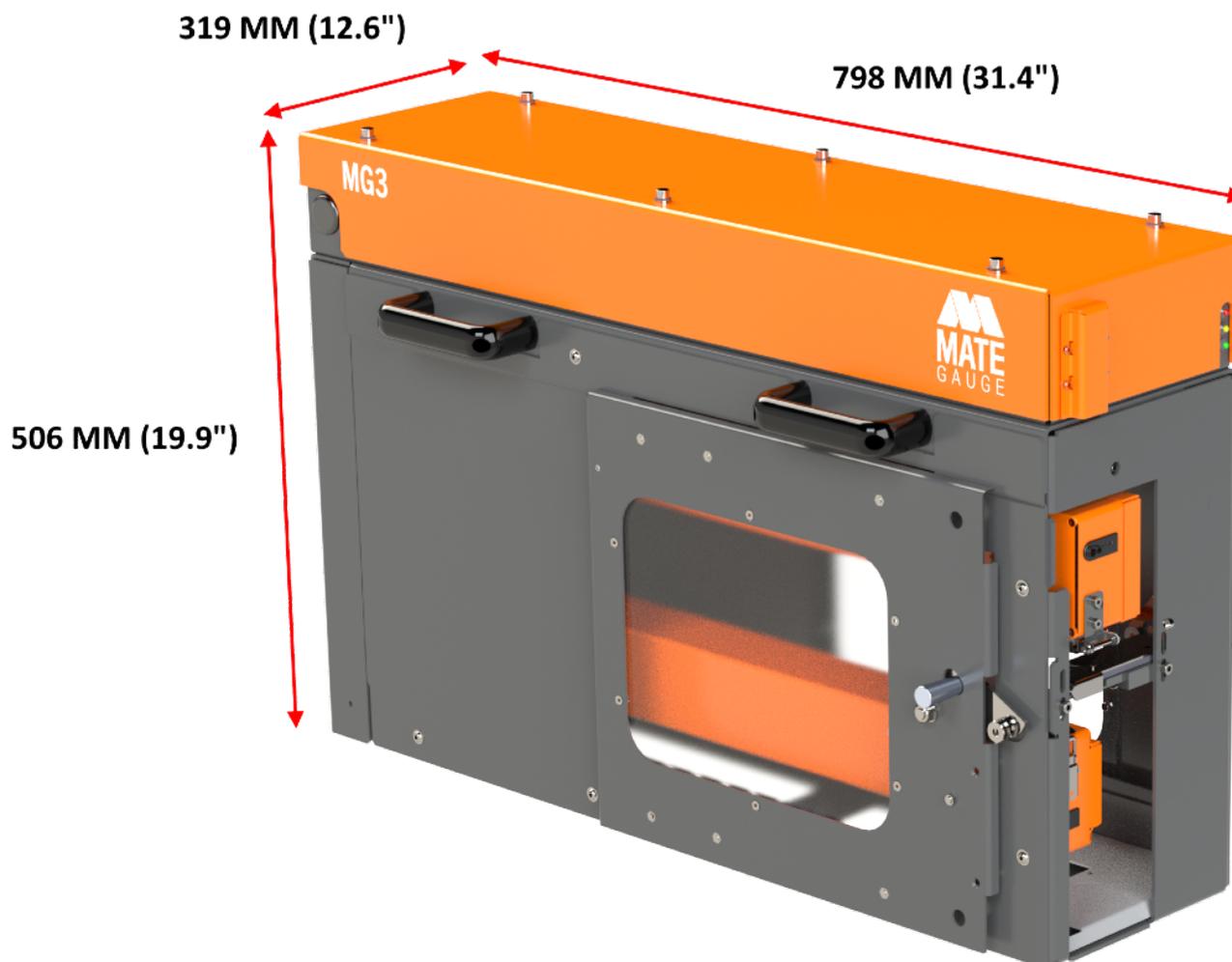
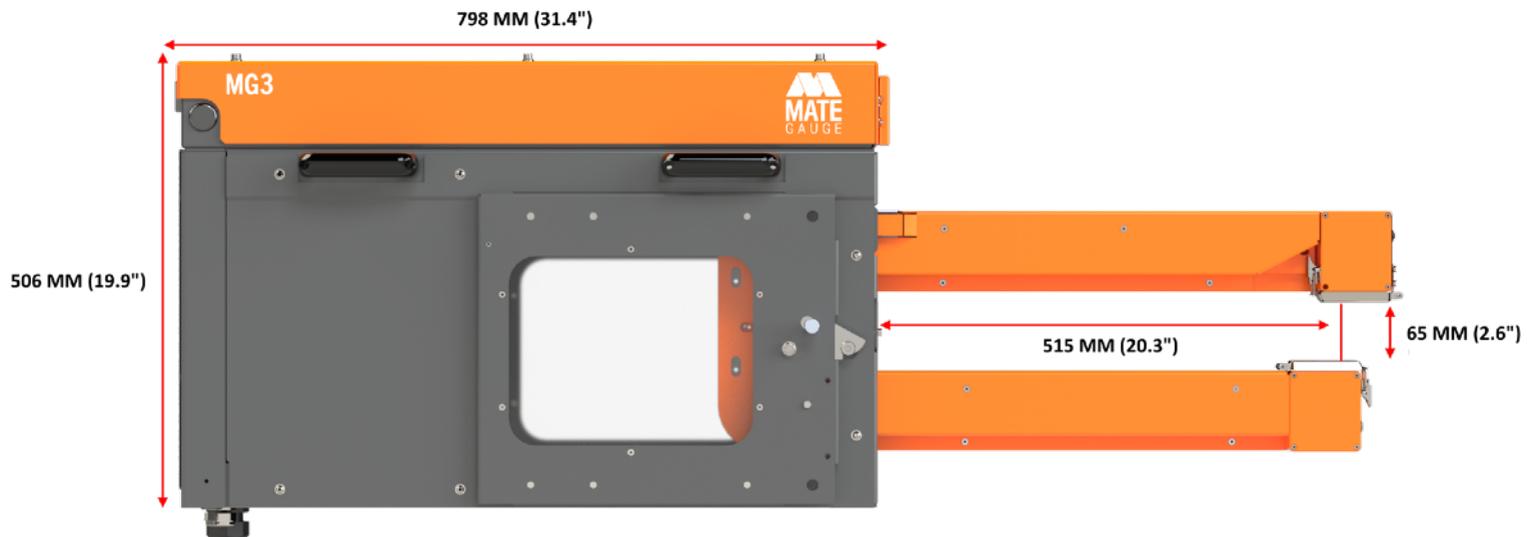
1. MG3 Installed on Wet Side
2. MG3 Installed on Dry Side
3. MG3 for Stacker Integration

01 MG3 Overview

Mate Gauge's pasting line solutions all incorporate our standard **MG3 Thickness Gauge**. Developed in collaboration with industry-leading manufacturers, this unique product is designed to withstand demanding conditions while delivering the precise measurement data essential for lead-acid battery manufacturing.



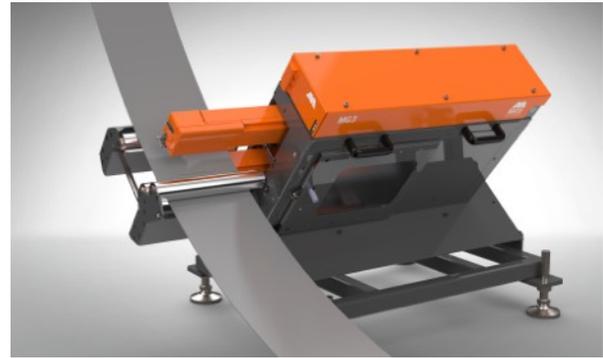
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02 Installation Options

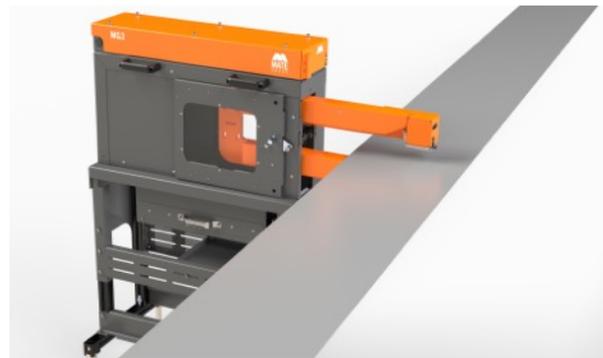
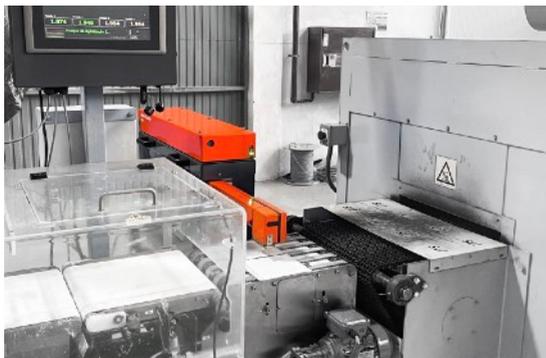
OPTION 1 MG3 installed on the Wet Side

Positioned closest to the paster for the fastest response times, seamlessly fitting into existing control loops without extending the production line.



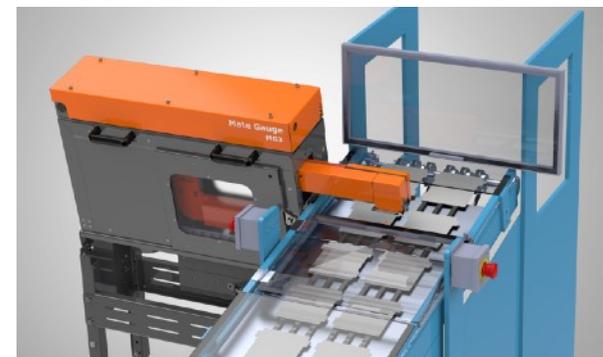
OPTION 2 MG3 installed on the Dry Side

Measures thickness just before curing, providing the most accurate final thickness readings. Ideal for panel lines without a stacker.

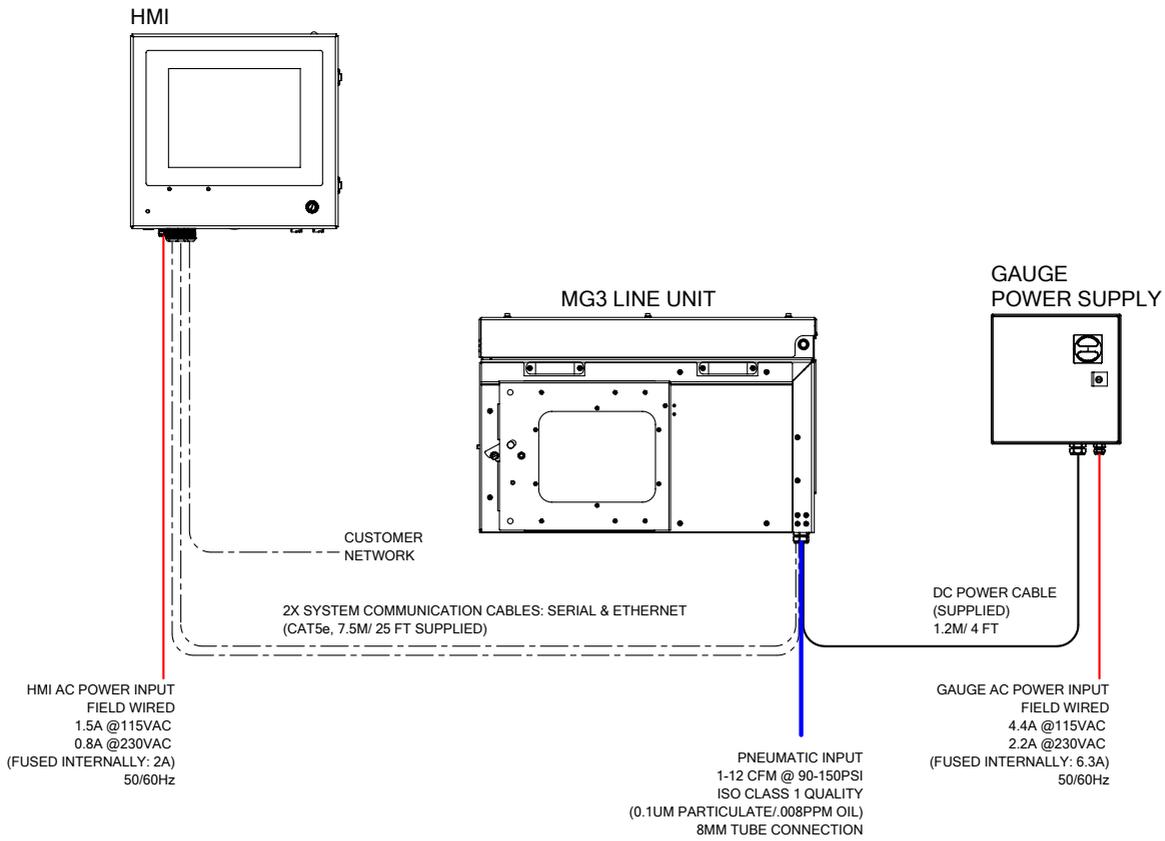


OPTION 3 MG3 integrated with a Stacker Conveyor

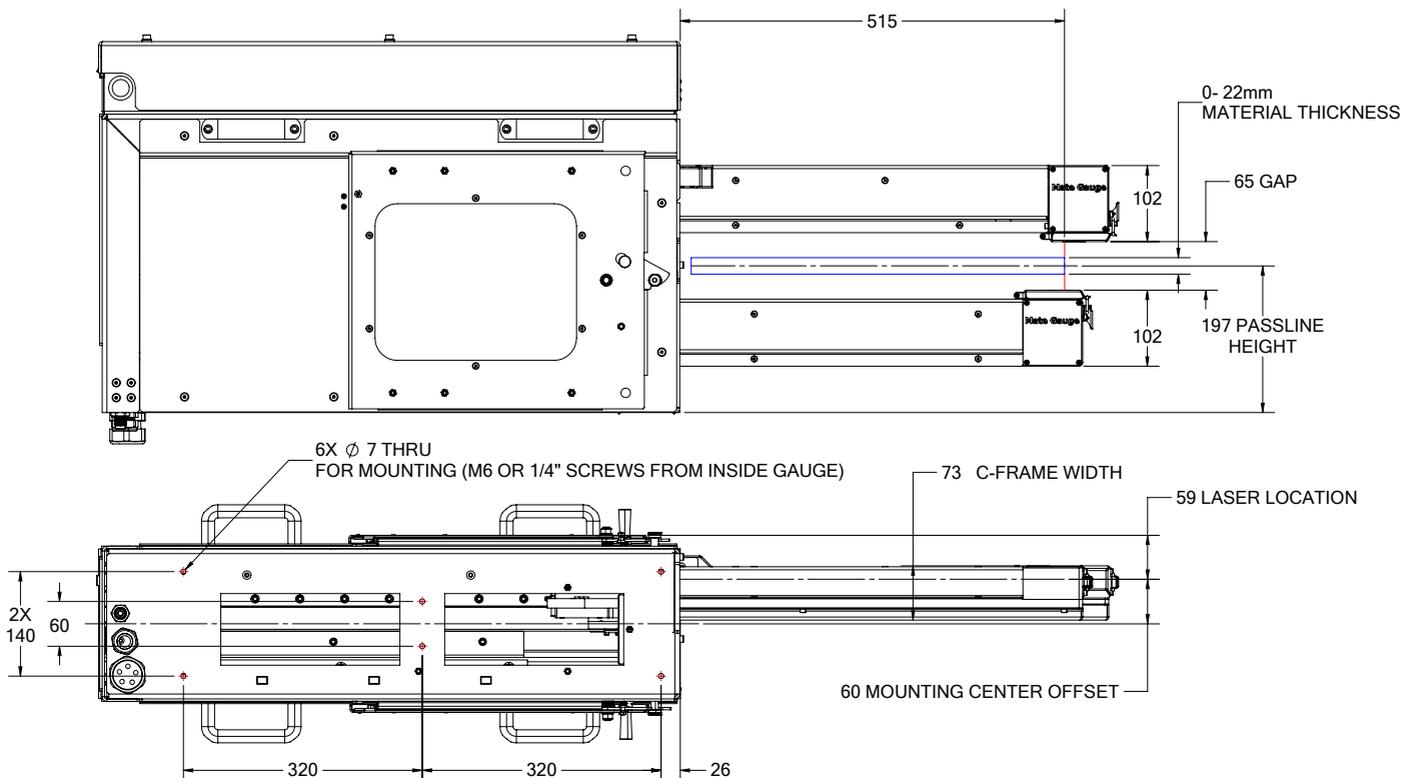
Space-efficient option that integrates directly with stacker conveyors, optimizing line layout while maintaining precise measurement control.



MG3 Core



Line Unit



03 Technical Specifications

THICKNESS MEASUREMENT DETAILS

Sensors	50mm Standard	
Resolution	1.5 μm	[0.00006 in]
Accuracy (typical)	4 μm	[0.000016 in]
Stroke	515 mm	[20.3 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 Power	100-240 VAC @ 50/60Hz, 4.4-2.2A	
HMI Power	100-240VAC @ 50/60Hz, 1.5-0.8A	
Air Supply	2-12 CFM @ 90-110 PSI	

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	5 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$	[41 $^{\circ}\text{F}$ to 120 $^{\circ}\text{F}$]
Humidity	< 90%	

04 Accessories

Stand Options

The MG3 Stand ensures a stable and secure mounting point for the MG3 system. We offer specialized stands for both the wet side and dry side of the pasting line, allowing seamless integration based on the gauge's placement and specific production requirements.

MG3 Wet Side Pasting Stand (35 ° incline)

Wet side before the flash dryer

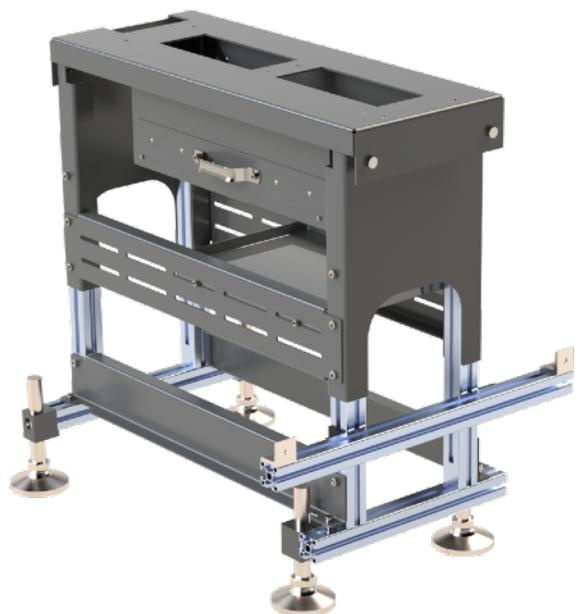
P/N: 10043000



MG3 Flat Stand

Dry side after the flash dryer

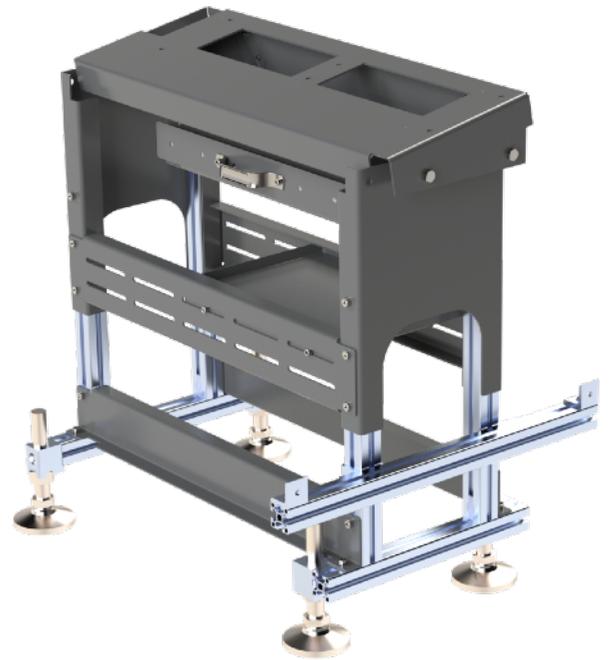
P/N: 10042846



MG3 Stacker Stand (10° incline)

Dry side after the flash dryer,
integrated with the stacker.

P/N: 10042270

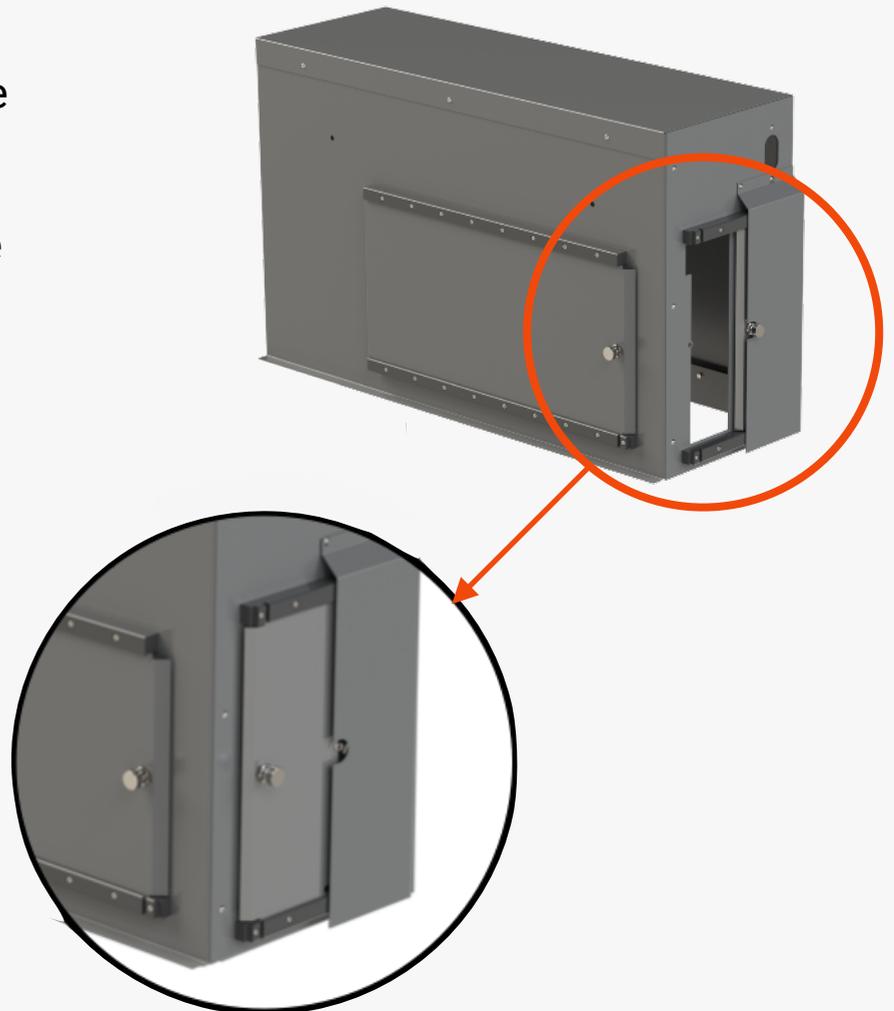


Protective Cover

Our Protective Cover reduces the
need for frequent cleaning by
effectively preventing dirt and
debris from accumulating on the
gauge.

Designed for the wet side
installations after the
pasting machine.

P/N: 10043030



05 Software

Plates App

The Plates app is used for measuring on lines where several small samples will pass the gauge within the duration of each scan. This app provides measurements for lanes, representing the sides of each plate as well as overall plate averages.



Gauge and Go App

The Gauge and Go app measures at discrete locations across the material. The c-frame travels to a preset location and measures there for a determined amount of time. Measuring this way is ideal for continuous strips, allowing for a clear display of thickness readings at these locations.

06 Commissioning

Mate Gauge provides comprehensive support services to ensure optimal performance of your MG3 system. From initial setup to ongoing maintenance, our team is committed to your success.

- **Remote Commissioning:** Provides online setup guidance and remote diagnostics to ensure proper system functionality.
- **On-site Commissioning:** An Application Engineer is physically present to oversee installation, testing, and system handover.

North America
P/N: 1004534

Outside North America
P/N: 1004530

Remote Commissioning
P/N: 10044022



PACKAGE 1 MG3 Installed on Wet Side



MG3



MG3 Wet Side Stand



Cover



Commissioning

Part Name	Part Number	Notes
MG3	10042215	
MG3 Wet Side Pasting Stand	10043000	Optional
MG3 Protective Cover	10043030	Optional
Commissioning:		
North America	1004534	
Outside North America	1004530	
Remote	10044022	

PACKAGE 2 MG3 Installed on Dry Side



MG3



MG3 Flat Stand



Commissioning

Part Name	Part Number	Notes
MG3	10042215	
MG3 Flat Stand	10042846	Optional
Commissioning:		
North America	1004534	
Outside North America	1004530	
Remote	10044022	

PACKAGE 3 MG3 for Stacker Integration



MG3



MG3 Stacker Stand



Commissioning

Part Name	Part Number	Notes
MG3 System	10042215	
MG3 Stacker Stand	10042270	Optional
Commissioning:		
North America	1004534	
Outside North America	1004530	
Remote	10044022	



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