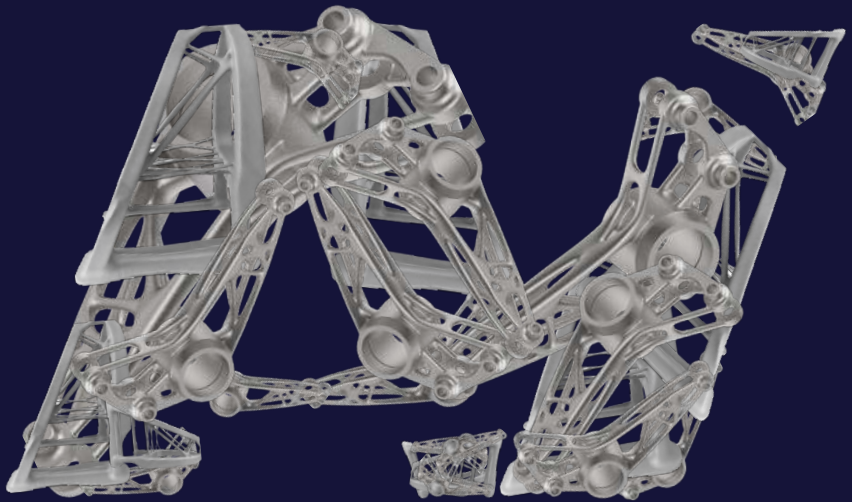


Start. Automate. Expand.



Additive Industries

The MetalFAB^{G2}

A modular & automated Metal AM Printer

The MetalFAB is an innovative and versatile modular metal AM printer that offers a range of cutting-edge automation and customisation options. With our unique optional modules, this printer optimises efficiency and significantly streamlines automation processes. The MetalFAB modular design provides options for growth, allowing you to expand at your pace.

Incorporating the Herding filter, Powder Load Tool and fully automated inert powder recovery, operators are safer with this printer than any other on the market. To ensure precision, the MetalFAB is equipped with a Multibeam Laser calibration tool that allows the operator to conduct all 5 beam measurements automatically, dramatically increasing efficiency.

Utilising Laser Powder Bed Fusion (LPBF) technology, the MetalFAB stands out as a pioneering and adaptable modular metal AM printer, providing a variety of advanced automation and customisation features.



Over 90% OEE
during a single shift



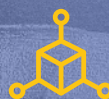
Minimal machine footprint
with maximum build capacity



The ultimate
multi-material printer



4 x 500W
lasers



Build volume of
420 x 420 x 400mm

Take your metal additive applications to an industrial level

Automated

Powder Handling

Operator safety is ensured by the MetalFAB^{G2}, which preserves the metal powder under inert conditions throughout the production cycle, from loading to de-powdering, sieving to extraction from the finished job, all without any contact with the powder.

Automated

Laser Calibration

With a robust design and state-of-the-art laser calibration, the MetalFAB^{G2} guarantees industrial-quality components and consistent reproducibility. Its automated laser calibration, covering beam focus, stability, position, laser power, spot size, beam shape, and laser-to-laser position, enhances repeatability and productivity.

Automated

Build Changeovers

Reduce labour needs with our unique automation that allows up to eight sequential builds without manual intervention. From starting jobs remotely to de-powdering and sieving, the MetalFAB^{G2} ensures exceptional uptime, unmatched build rates, and the most cost-effective production per part.

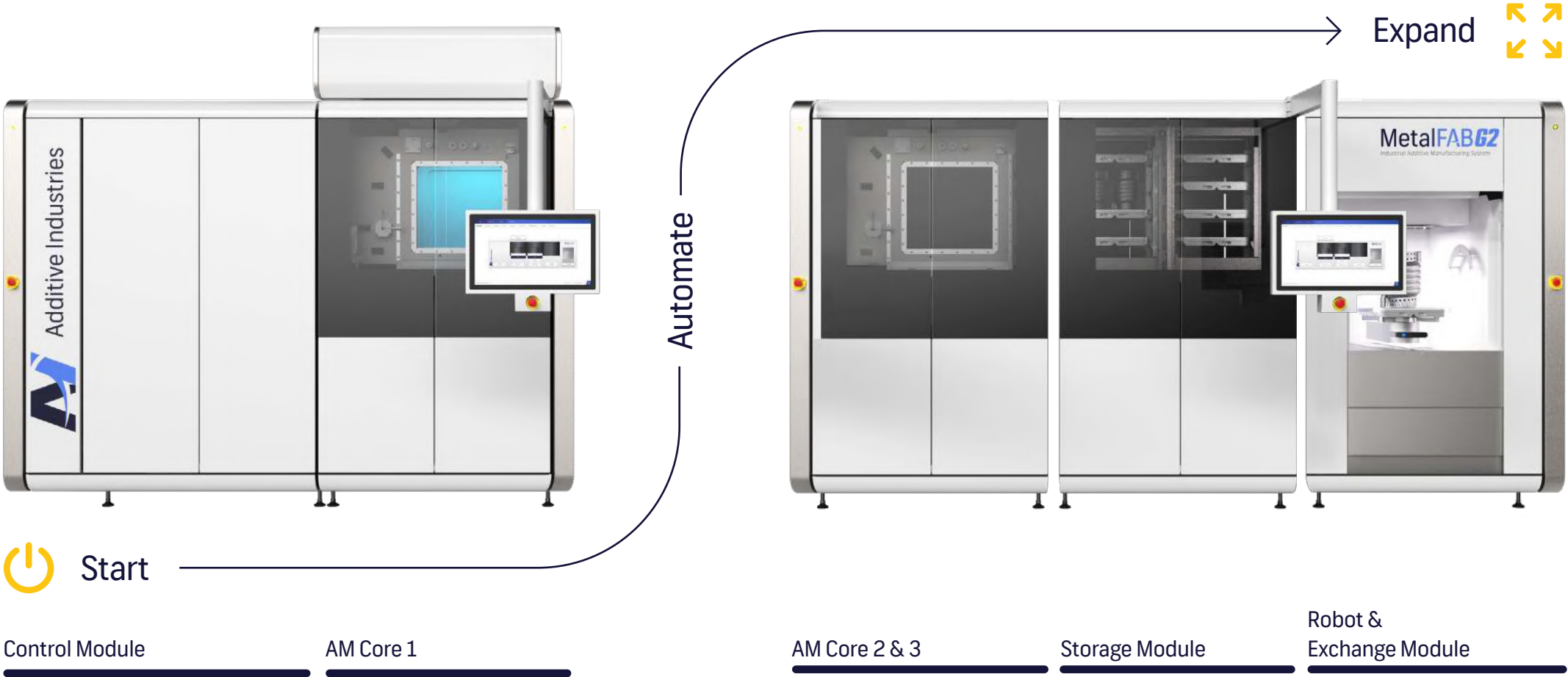
MetalFAB^{G2} Specifications *

Process Type	Laser Powder Bed Fusion (LPBF)	Accuracy	< 0.050 + 0.002 x part length [mm]
Net build envelope	420 x 420 x 400 [mm] (16.5 x 16.5 x 15.7 [in])	Reproducibility	< 0.050 [mm]
Laser	Yb fibre lasers 500W	Layer Thickness	20-100 µm
Number of Lasers	1 to 4 full-field, preventing laser overlap regions	Safety	No direct powder exposure during regular operations
Configurability	Configure up to 11 modules for productivity or post-processing	Storage positions	8 empty build plates
Build plate	Automated first layer position sensing	Materials	Titanium (Ti6Al4V), Aluminium (AlSi10Mg), Stainless Steel (316L), Nickel Alloy (IN718), Tool Steel (M300, M789), Copper (GRCop-42). Maximum 3 materials are possible in one system.
Powder handling	Automated extraction, sieving and recycling during the build cycle	Preheating	175 °C
Autonomous operation	Multiple fully automated build turnovers		
Productivity	Up to 150 cc/hr deposition (1.25kg/hr)		

* Specification may change

Build your own MetalFABG2

The MetalFABG2 provides flexible module configurations to tailor to your unique requirements.



- Upgrade with minimal downtime
- Full-field 420mm with Dynamic Laser Alignment
- Swift maintenance through core removal
- Automated powder loading & de-powdering system
- Vibration isolated build chamber & scanners
- Autonomous changeover
- Dynamic focus optics
- Automated build plate & product handling

Your Path to Success in Metal AM with Additive Industries

With our extensive experience in manufacturing top-notch metal AM components, we have the expertise and innovative solutions to assist you in maximizing machine productivity and delivering consistent printing results on a large scale, no matter where you are in your metal additive journey.

Stage 1 Identification

Our specialists will support new adopters of metal AM, helping you build a robust business model, identifying ideal AM components, and offering tailored design advice for the process.



**Application Identification
& Building a Business Case**

Stage 2 Development

During development, we will help you create a customised production solution, from material selection and prototype design to process optimization.



**Parameter Sets
Development**

Stage 4 Service & Facility Planning

At this stage, our representative will visit your facility to discuss safety, equipment handling, installation requirements, and provide training for safe operation and maintenance once the installation is complete.



**Facility Check &
Workforce Development**

Stage 3 Qualification

In the qualification stage, our team ensures your additive manufacturing process aligns with supplier and industry standards. We collaborate with you to develop a strategic blueprint highlighting MetalFAB's compliance through process and part qualifications tailored to your industry.



**Part & Process
Qualification**

**Optimising Build Setup &
Scaling Up for Higher Volumes**



Stage 5 Production

In the production stage, we focus on aligning your investment with market demands, optimising build setups for speed and quality. As production scales, we will help identify cost-saving opportunities and enhance productivity for serial production.

Customer Success Stories

Alfa Romeo
F1 TEAM

The F1® stalwart utilises metal additive manufacturing to produce high-performance, safety-critical titanium inserts on short lead times while maintaining uncompromising quality.



By using MetalFABG2 for Tiguan tooling production, VW not only achieved significant cost savings but also reduced lead time and improved the speed of design iterations.

K3D

The KaaK Group subsidiary transformed their robot arm with MetalFABG2, achieving a 60% cost and lead time reduction, and a 20% machine capacity increase.

"Additive Industries is the only company providing industrially integrated scalable metal additive manufacturing solutions that we can acquire today"



ADDMAN
POWER THE PURSUIT™

SAFRAN

DE VALK
value added metals

CATAPULT
additive solutions

ADDAM **K/M/E**

Spes 3D
Print your own way

SAUBER Technologies



About Additive Industries

Additive Industries is a pioneer in industrial 3D metal printers offering cutting-edge technology that enable customers to industrialise and accelerate their manufacturing processes. As a company, we help to solve the challenges of the most forward-looking industry leaders in high demanding sectors, including aerospace, automotive, high tech and energy.



Additive Industries' passion for innovation and drive for excellence define our commitment to inspiring customers and shaping the future of production through metal additive manufacturing.

Contact a specialist



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