

Key strengths

Our value proposition

High powered dual laser system with **full scan field** as standard feature

Automatic build reports

Better axes positioning, faster movements and enhanced serviceability through an all-axes servo motor system



A multi-touch screen with a smart user-friendly Graphical User Interface (GUI)

High resolution digital encoders in scanners for superior positioning accuracy.

Smart notifications and alerts on machine status

Key strengths

Our value proposition

Remote machine monitor and control – IoT ready

Automatic filtration system

A continual in-situ inspection of dimensions



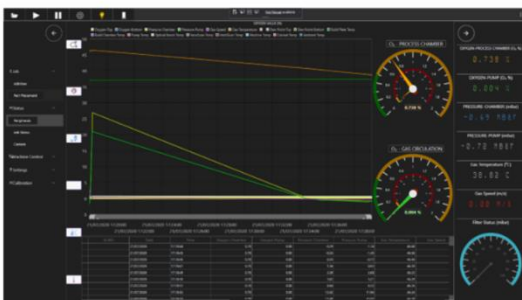
Innovative multi lip recoating system to minimize downtime

Machine complying to the **ISO ASTM 52902** standards of geometric capability assessment

One-touch machine environment preparation

Machine Software

Distinct features



- a) **IoT Features:** Built in diagnostics and intuitive trouble shooting system.
- b) **Machine Parameters:** Fully open, editable parameters for aluminium alloy, stainless steels, maraging steel and Inconel alloys. – **VoluMelt™**
- c) **Vision system:** Camera with image processing system and real-time fault identification.
- d) **Powder management system:** Uninterrupted powder management with optional automated powder sieve and load system.
- e) **Build Software:** A build processing software with troubleshooting features for seamless printing.
- f) **Remote monitoring & Control of the machine**

amace AM-400



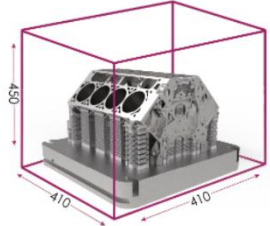
powered by **materialise**

- The ALM 400's print control hardware and software has been developed in collaboration with experts from materialize Belgium who have further validated the design and configuration of the machine.
- Our machine comes bundled with perpetual license of materialise magics RP ensuring your machine is performing at its best for many years to come

Technical Specifications


Build Envelope	410mm x 410mm x 450mm
Laser Power	2 x 1000W Yb- fiber laser
Scanning Speed	Up to 9m/s
Layer Thickness	30 to 100µm
Beam focus diameter	80µm to 120µm
Re-coater type	High durability soft bi-directional multi blade re-coater
Preparation Software	Materialise Magics RP with customised amace build processor
Dimensions	3200mm (W) x 2400mm (D) x 3200mm(H)
Power Supply	440V – 50Hz (3 Phase)

Key Features of ALM-400




Large Build Volume of 410mm x 410mm x 450mm

- ALM-400 allows large-sized or high-volume components to be printed
- Increased flexibility of jobs that can be done
- Ability to print variable layer thickness



Dual 1000W Lasers

- Powered by 2 x 1000W lasers with full scan field, functioning independently of each other.
- Offers high productivity while giving the option of working with a wider range of materials.
- Exceptional precision and high positional accuracy with superior beam spot quality.



Smart and Intuitive Control

- Machine controller provides smart notifications about the performance status.
- Predictive interface to help users gauge potential failures and take necessary actions.
- Internet ready machine. Can be controlled from any remote location.



20 days lead time reduction
Material: IN625

Faster development

AM does not need specific tooling or casting. Any design may be produced in a short period of time from a cost-effective perspective.



30% weight reduction
Material: AlSi10Mg

Light Weight

AM enables the design and manufacturing of highly stable lightweight structures that cannot be produced using conventional technologies.



50% increase in flow efficiency
Material: 18Ni300

Produce complex geometries

Internal channels for conformal cooling, hidden features, thin walls and lattice structures are only possible in AM.