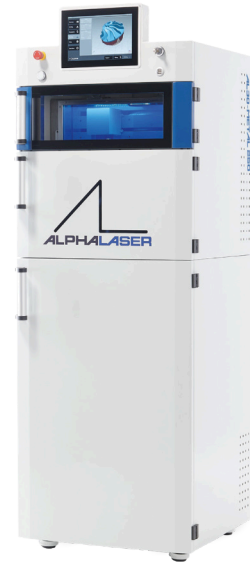


AL3D-METAL 200

ADDITIVE MANUFACTURING WITHOUT DIRECT POWDER CONTACT

Description

The closed powder circuit ensures more safety at work because the operator doesn't come into contact with the powder during the entire printing process. Specially developed for the precision mechanics, medical technology, dental and jewellery industries as well as research and development laboratories, our 3D printer offers optimum detail accuracy, precision and maximum safety in handling the laser and the metal powder.



AL3D-METAL 200

AL3D-CARTRIDGE

Intelligent cartridge system for safe and economical powder handling

- Material supply made easy
- Fast process preparation
- Plug & Play - transfer of material information to the printer
- Unmatched material utilization
- Ideal for high-priced materials and precious metals



AL3D-CARTRIDGE

AL3D-CABIN

The unpacking station

- High operational safety for the user by a closed process chamber
- Clean separation of the sintered component from the residual powder
- Collection of residual material for possible reuse
- Ergonomic workplace



AL3D-CABIN

EASY TO USE

Select a cartridge with the desired material - insert into the printer - select print file – start the printing process



AL3D-METAL 200-50

Ideal for the production of finest and complex geometries

- Very fine laser spot for finest and complex geometries
- Powerful laser
- High powder yield
- Exact print process with the intelligent software AL3D-OS
- Footprint of just 600 × 600 mm
- Closed gas-circuit for a reduced gas consumption
- Little energy consumption

TECHNICAL DATA

	AL3D-Metal 200-50	AL3D-Metal 200-100
LASER & OPTIC		
Laser type/wave length	Fiber laser 200 W CW, 1070 nm	
Welding spot Ø	50 µm	
Scan speed	max. 5 m/s	
Process parameters	Open access to machine and process parameters	
SOFTWARE		
Operation	15.6" Touchscreen, keyboard and mouse possible	
Connectivity	Ethernet; 2 × USB	
Software	AL3D-OS, offline version for project creation, TeamViewer remote access	
Externe software	Autodesk Netfabb	
File format CAD import	STL	
Print preparation	Easy support; integrated slicer in software	
MATERIALS		
Alloys	Metal powder, grain size fraction between 10-45 µm	
Achievable component density	Iron alloys, Nickel-based alloys, Cobalt-chrome alloys, Precious metals, Reactive metals/more on demand	
Construction volume	> 99 %	
Layer thickness	Ø 50 mm; z 50 mm	Ø 100 mm; z 85 mm
EXTERNAL CONNECTIONS		
Electrical connection	10 - 50 µm	
Permissible humidity	230 V, 50 Hz / 60 Hz, max. 16 A	
Permissible ambient temperature	max. 70 %	
Protective gas/argon (necessary connection)	15 - 30° C	
Gas consumption during operation	4.5-6 bar input pressure, Ø 6 mm hose fitting	
CABIN		
Connection for ext. vacuum cleaner	<5 L/min - Purge function 20 L/min	
EXTERNAL DIMENSIONS		
Weight	NW32 connection	
W × D × H	ca. 180 kg	
EXTERNAL DIMENSIONS CABIN		
Weight	600 × 617 × 1770	
W × D × H	ca. 100 kg	
	600 × 617 × 1770	