



ADDITIVE LASER TECHNOLOGY



IAMG

Industrial 3D printer for Additive Manufacturing of metal products

ALFA-280N

- Rapid material change module
- 3-axis scan system
- Autonomous replaceable print module
- Powder unpacking module for improved build turnaround
- Advanced print process monitoring system
- Variable laser spot size 65-300 μm
- Productivity up to 50 cm^3/h
- Print accuracy up to 50 μm
- Automated inert gas filtration system
- Open platform system for unlimited experimentation



International Additive Manufacturing Group

www.iamg.ltd



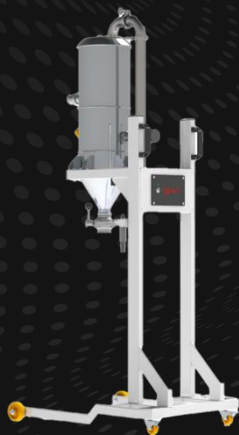
3D-Printer ALFA-280N

Build chamber size (L x W x H)	280 x 280 x 500 mm
Configuration of the optical system	Single (standard) double or quad (optional)
Laser Type	Fiber laser with water cooling
Laser optical power	1x 500W (standard) 2x 500W/ 4x 500W (optional)
Laser focused spot size	65 – 600 μ m
Laser nominal wavelength	1070 $\pm$ 2nm (532 nm optional)
Layer thickness	20-200 μ m
Scan system maximum positioning speed	10 m/s
Scan system positioning accuracy	28 nm
Inert gas consumption during operation	$\leq$ 5 l/min
Electrical connection	380 V, ~ 50 Hz
Power consumption	8 kW
Printer dimensions (D X W x H)	2000 x 1100 x 2300 mm
Printer dry weight	2270 kg

Supplementary Equipment

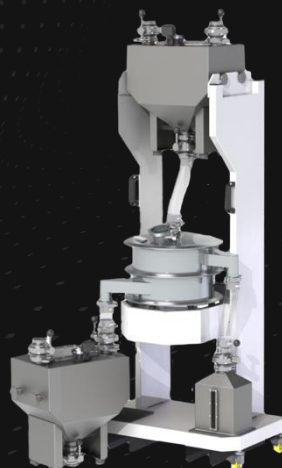
Vacuum powder transporter APR-043

Device designed for powder removal after 3D printing process completion within the build chamber of the 3D printer



Automated powder sieving station APS-052

Device designed for sieving, mixing and homogenization of metal powder in preparation for reuse in metal 3D printer



Build chamber unpacking module APS-063

Device designed for powder removal after 3D printing process from the printer component within the removal build chamber

