



Industrial 3D printer for printing metal products

ALFA-280N

- Quick material change system
- 3-axis scanning system
- Standalone, replaceable printing module
- Additional unpacking station for continuous printing
- Advanced printing process monitoring
- Laser beam focal diameter 65-300 μm
- Productivity up to 50 cm^3/hour
- Printing accuracy up to 50 μm
- Automatic inert gas filtration system
- Open platform for unlimited experimentation





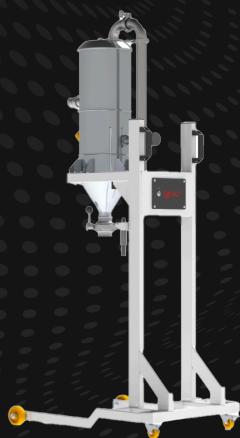
ALFA-280N 3D PRINTER

Working area dimensions (W x D x H)	280 x 280 x 500 mm
Optical system configuration	single / double or quad (optional)
Laser type	fiber (ytterbium) with water cooling
Optical power of the laser	1 x 500 W / 2 x 500 W or 4 x 500 W (optional)
Focal diameter of the laser beam	65 - 300 μ m
Laser radiation wavelength	1070 \pm 2 nm (532 nm optional)
Layer thickness	20 - 200 μ m
Maximum scanning speed of a single optical system	10 m/s
Accuracy of laser beam position repetition	0.28 μ m
Inert gas consumption during operation	\leq 5 l/min
Power supply	\sim 230 V, 50 Hz
Power consumption	8 kW
Overall dimensions (W x D x H)	2000 x 1100 x 2300 mm
Weight (without powder)	2,270 kg

ADDITIONAL EQUIPMENT

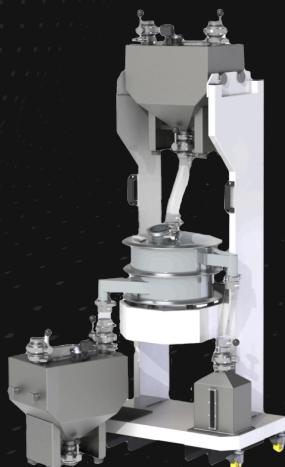
Vacuum conveyor for metal powder APR-043

The device is designed to collect spent non-reactive metal powder from the working area of a 3D printer.



Automated metal powder screening station APS-052

The device is designed for sifting, mixing, and homogenizing metal powder for reuse.



Unpacking module for printed parts APS-063

The module is part of the complex and is designed to separate the printed part from the metal powder.

