



Industrial machine for metal 3D printing

ALFA-280

- Integrated user-friendly interface
- 3-axis scanning system
- Build plate heating up to 200°C
- Continuous high-precision powder feeding system
- Advanced process monitoring system
- Adjustable laser spot size
75-200 μm
- Build rate up to 50 cm^3/hour
- Printing accuracy up to 50 μm
- Integrated inert gas filter regeneration system
- Open platform for unlimited development





3D PRINTER ALFA-280

Build envelope (W x D x H)	280 x 280 x 300 mm
3D optics configuration	single / dual or quadro (optional)
Laser system	water-cooled ytterbium fiber laser
Laser power	1 x 500 W / 2 x 500 W or 4 x 500 W (optional)
Laser spot size	75 - 200 μ m
Laser wavelength	1070 \pm 2 nm
Layer thickness	20 - 200 μ m
Maximum scan speed of individual optical system	10 m/s
Positioning accuracy	0,28 μ m
Inert gas consumption	\leq 5 l/min
Power supply	~230 V, 50 Hz
Power consumption	6 kW
Dimensions (W x D x H)	2240 x 1160 x 2110 mm
Net weight	970 kg

AUXILIARY EQUIPMENT

Vacuum Powder Removal Unit APR-042

Productivity	100 - 500 kg/h
Average compressed air consumption	360 l/min
Compressed air operating pressure	8 bar
Power supply	~230 V, 50 Hz
Power consumption	45 W
Dimensions (W x D x H)	620 x 405 x 1800 mm
Net weight	50 kg

The unit is used for collection of non-reactive metal powder from the build chamber of 3D printer.

Automated Powder Sieving Unit APS-052

Mode of operation	ultrasonics, vibrating
Productivity	\leq 40 kg/h
Power supply	~230 V, 50 Hz
Power consumption	300 W
Dimensions (W x D x H)	590 x 490 x 2025 mm
Net weight	115 kg

The unit is used for sieving, mixing and homogenizing of metal powder for reuse.

