



ACONITY 3D

ELABORATING YOUR ADDITIVE PRODUCTION



Aconity 3D Metal WIRE



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Aconity3D MetalWIRE

The Aconity3D MetalWIRE extends Aconity's equipment portfolio to powder free wire-based 3D metal printing. The laser-based system combines a compact machine design with a large build space of Ø 400 mm x H 780 mm, perfectly suited for producing mid-sized AM parts.

The wire feed is enveloped by a coaxial shielding gas nozzle and a unique ring-shaped intensity profile of the laser beam, enabling direction-independent material deposition.

By processing standardized welding wires, large metal components may be produced at cut costs, facilitated handling and improved quality assurance for a truly industrialized manufacturing.

Real time control of the 6-axis robot and 2-axis rotary tilt table allow for upmost flexibility in terms of part complexity, whereas a powerful preheating of up to 500 °C reduces internal stresses and extends the scope of applicable materials.

TECHNICAL SPECIFICATIONS

BUILD SPACE		Ø 400 mm x H 780 mm
LASER CONFIGURATION		Single Mode Fiber 1200 W
OPTICS CONFIGURATION		ring-shaped intensity profile with coaxial wire feed for direction-independent material deposition
MECHANICAL CONFIGURATION		6-axis robot 2-axis rotary tilt table
PREHEATING		500 °C
WIRE DIAMETER		0.8 mm
MATERIALS		Stainless Steel, Inconel and Titanium
INERT GAS TYPE/PRESSURE		Argon 4.6 / 6 bar Nitrogen / 6 bar
INERT GAS SUPPLY		Coaxial
ROBOTER CONTROL		Realtime tool path processing
MACHINE DIMENSIONS (W x D x H)		3550 x 1500 x 2550 mm
MACHINE WEIGHT		1960 kg