



# ACONITY 3D

ELABORATING YOUR ADDITIVE PRODUCTION



## ACONITY *MIDI+*



EQUIPMENT



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CONSULTING



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# ACONITYMIDI+

The ACONITYMIDI+ represents Aconity3D's newest machine concept for efficient industrial L-PBF application. The exchangeable process chamber allows for parallelized setup times yielding decreased part costs. For maximum material flexibility and quality assurance, high temperature preheating of up to 1000 °C and Aconity3D's all new process monitoring system are available. The ACONITYMIDI+ is also available with up to 4 Lasers in the QUATTRO-Laser configuration, further increasing productivity.

As for all Aconity systems, the ACONITYMIDI+ is equipped with the web-based control software ACONITYSTUDIO, allowing for remote access to all relevant process parameters and machine components.

## TECHNICAL SPECIFICATIONS

BUILD SPACE	Ø 250 mm x H 250 mm
OPTIONAL BUILD SPACE REDUCTION	Ø 100 mm x H 250 mm Ø 55 mm x H 250 mm
LASER CONFIGURATION	Up to 4x Single Mode 400 W / 500 W / 700 W / 1000 W
OPTICS CONFIGURATION / SPOT SIZE	F-Theta / 80 µm 3D Scanning / 80 - 500 µm
PROCESS MONITORING OPTIONS	Coaxial pyrometer Coaxial high speed CMOS
PREHEATING TEMP / BUILD SPACE	500 °C / Ø 250 mm x H 180 mm 1000 °C / Ø 150 mm x H 150 mm
FULLY ADAPTABLE PROCESS PARAMETERS	Maximum flexibility for application development
LAYER THICKNESS	Down to 10 µm
OPTIONAL ADDITIONAL BUILD CHAMBER AND SETUP STATION	Parallelized machine setup
INERT GAS TYPE / PRESSURE	Argon 4.6 / 6 bar Nitrogen / 6 bar
INERT GAS CONSUMPTION	< 5 l / min during process < 30 l / min during purging
RESIDUAL OXYGEN CONTENT	< 100 ppm
PRESSURIZED AIR TYPE / PRESSURE	ISO 8573-1:2010 [1:4:1] / 6 bar
PRESSURIZED AIR CONSUMPTION	< 50 l / min
MACHINE DIMENSIONS (W X D X H)	2700 mm x 1800 mm x 3000 mm
MACHINE WEIGHT W/O POWDER	1600 kg