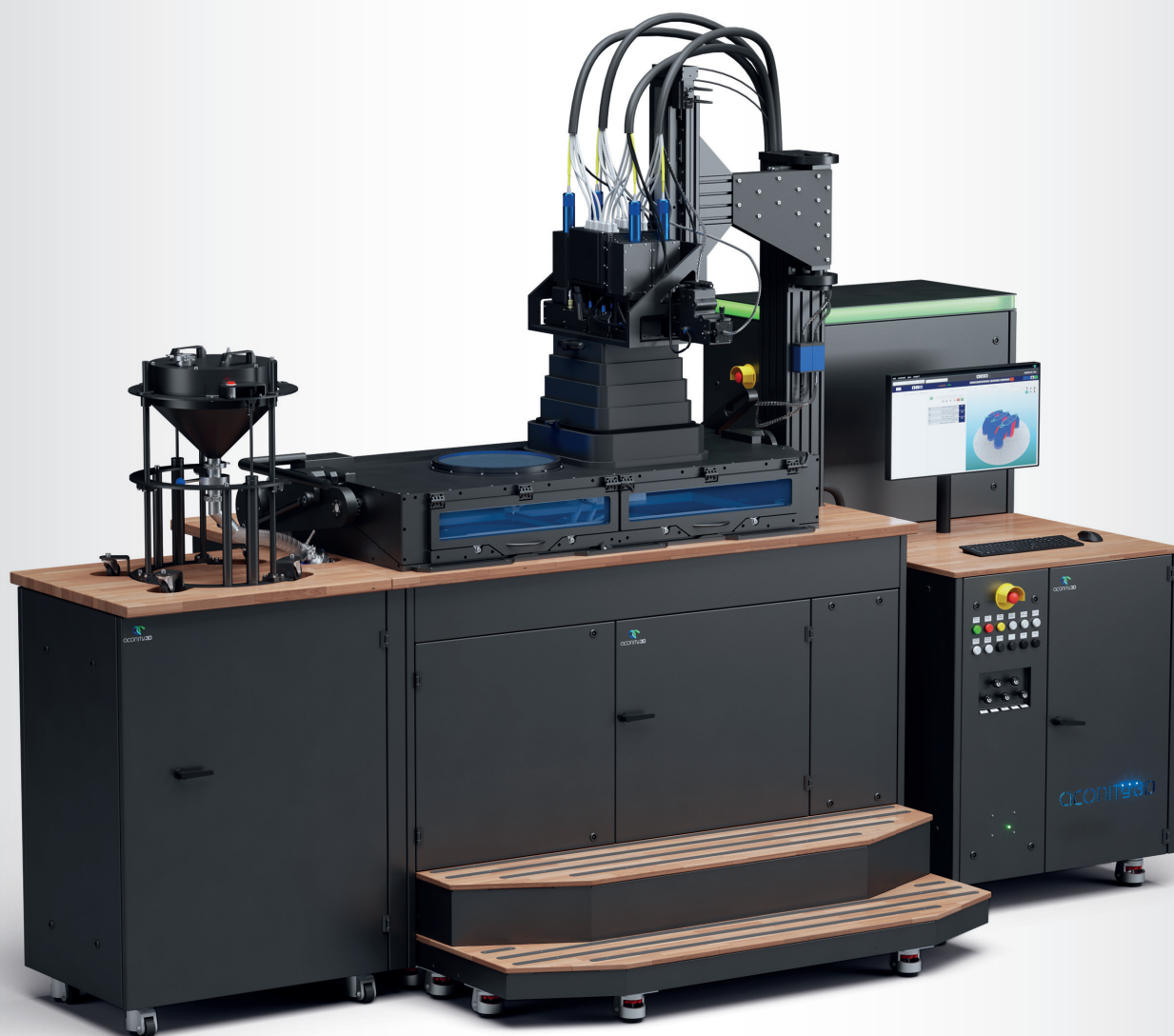




# ACONITY 3D

ELABORATING YOUR ADDITIVE PRODUCTION



## ACONITY ONE<sup>2</sup>



EQUIPMENT



JOB SHOP



CONSULTING



MATERIAL  
DISTRIBUTION



TESTING  
FACILITIES

# ACONITY ONE<sup>2</sup>

The ACONITY ONE<sup>2</sup> exhibits a large scale build platform of Ø 400 mm and may be equipped with up to four laser systems, thus offering an ideal manufacturing platform. Aconity's patented external powder feed allows for in-process powder refilling. The innovative swivelling mechanism enables fast material changes whilst granting access to all significant technical components.

As for all Aconity systems, the ACONITY ONE<sup>2</sup> is equipped with the control software ACONITY STUDIO that allows access to all relevant process parameters and can be modularly equipped with a preheating device, process monitoring or changed laser configurations for maximum customer benefit.

## TECHNICAL SPECIFICATIONS

BUILD SPACE	Ø 400 mm x H 400 mm
OPTIONAL BUILD SPACE REDUCTION	Ø 200 mm x H 400 mm
LASER CONFIGURATION	Multi Laser 1-4 (full scan field) Single Mode Fiber 400 W / 1000 W
OPTICS CONFIGURATION / SPOT SIZE	3D Scanning / 80 - 500 µm
PROCESS MONITORING OPTIONS*	Coaxial pyrometer Coaxial high speed CMOS
PREHEATING TEMP / HEATED AREA	200 °C / Ø 400 mm x H 300 mm 500 °C / Ø 350 mm x H 300 mm 1000 °C / Ø 200 mm x H 300 mm
FULLY ADAPTABLE PROCESS PARAMETERS	Maximum flexibility for application development
LAYER THICKNESS	Down to 10 µm
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
OPTIONAL EXTERNAL POWDER FEED	In-process refilling
RESIDUAL OXYGEN CONTENT	< 500 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)	4040 mm x 1750 mm x 3000 mm
MACHINE WEIGHT W/O POWDER	2080 kg

\*In collaboration with Fraunhofer ILT