ACONITY 3D

ELABORATING YOUR ADDITIVE PRODUCTION

ACONITY MINI

EQUIPMENT JOB SHOP CONSULTING MATERIAL DISTRIBUTION TESTING FACILITIES

ACONITY ***MINI***

The *ACONITY* ***MINI*** represents Aconity3D's entry-level laboratory system. With a build space of Ø 140 mm and full access to all relevant process parameters, this system is designed for efficient material research. Additionally, a preheating device, process monitoring or changed laser configurations are available for this system to meet maximum customer benefit.

As for all Aconity systems, the *ACONITY* ***MINI*** is equipped with the control software *ACONITY* ***STUDIO*** which allows access to all relevant process parameters and machine components. The web-based user interface allows comfortable access to all functions from a remote desktop, within your office – if desired.

TECHNICAL SPECIFICATIONS

BUILD SPACE	Ø 140 mm x H 200 mm
OPTIONAL BUILD SPACE REDUCTION	Ø 55 mm x H 200 mm
LASER CONFIGURATION	Single Mode Fiber 200 W / 400 W
OPTICS CONFIGURATION / SPOT SIZE	F-Theta / 30 - 50 µm 3D Scanning / 80 - 500 µm
PROCESS MONITORING OPTIONS*	Coaxial pyrometer Coaxial high speed CMOS
PREHEATING TEMP / HEATED AREA	500 °C / Ø 140 mm x H 150 mm 800 °C / Ø 100 mm x H 150 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
OPTIONAL INERTIZATION SYSTEM	Vacuum / 1 mbar
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)	2050 mm x 1500 mm x 2295 mm
MACHINE WEIGHT W/O POWDER	1155 kg

* In collaboration with Fraunhofer ILT