TruPrint 5000

Technical data

TRUMPF

TruPrint 5000

BUILD VOLUME (CYLINDER)	Diameter 300 mm x 400 mm Height
EFFECTIVE BUILD VOLUME (WHEN PREHEATING > 200 °C)	Diameter 290 mm x 400 mm Height
PROCESSABLE MATERIALS	Metal powders for welding, such as stainless steels, tool steels, and aluminum alloys, nickel-based alloys, titanium alloys. Current availability of materials and their parameters available on request.
PREHEATING (STANDARD)	Up to 200 °C
PREHEATING (OPTION)	Up to 500 °C
MAXIMUM LASER POWER AT THE WORKPIECE (TRUMPF FIBER LASER)	500 W
BEAM DIAMETER (STANDARD)	80 µm
LAYER THICKNESS	30 - 150 µm
BUILD RATE	5 - 180 cm^3/h [1]
MINIMUM MEASURABLE OXYGEN LEVEL	Up to 100 ppm
CONNECTION AND CONSUMPTION	
ELECTRICAL CONNECTION (VOLTAGE)	400 V
ELECTRICAL CONNECTION (CURRENT INTENSITY)	32 A
ELECTRICAL CONNECTION (FREQUENCY)	50 Hz
SHIELDING GAS	Nitrogen, argon
STRUCTURAL DESIGN	
WEIGHT (INCLUDING FILTER, ELECTRICAL CABINET, POWDER)	7085 kg
DIMENSIONS (INCLUDING FILTER, ELECTRICAL CABINET) (W X H X D)	4616 mm x 1645 mm x 2038 mm
DIMENSIONS (INCLUDING FILTER, ELECTRICAL CABINET) (W X D X H) WITH 500 °C PREHEATING OPTION	5266 mm x 1645 mm x 2038 mm

Footnotes

1 — The actual build rate consisting of exposure and coating. Dependent on the configuration of the system, the process parameters, material and fill level.