

CREATOR

3D Metal Printer for Precision Components

The CREATOR 3D metal printer directly builds metal parts and components with highly complex geometries, eliminating the requirement for mold tools.

Internally, the build chamber features a unique coating operation with the powdered materials, which enables accelerated build speeds. The 250 W fiber laser provides excellent beam quality and performance stability. This ensures consistent process conditions and thus finished parts with superior resolution, high component density, and excellent surface quality.

The handling and processing of the printing data is realized directly via the CAD file thanks to the 3D printing module integrated into the APP SUITE CAM operating software.



FEATURES & BENEFITS

- Portable controller provides the most intuitive graphical user interface running on a tablet
- Powder reservoir can contain almost double the powder quantity
- Maximum productivity by a unique circular coater design
- Simple and precise positioning of the building platform due to the zero-point clamping system
- Integrated filter system cleans the oxygen-free atmosphere within the construction chamber
- 250 W laser power source provided with built-in tuning

APPLICATIONS

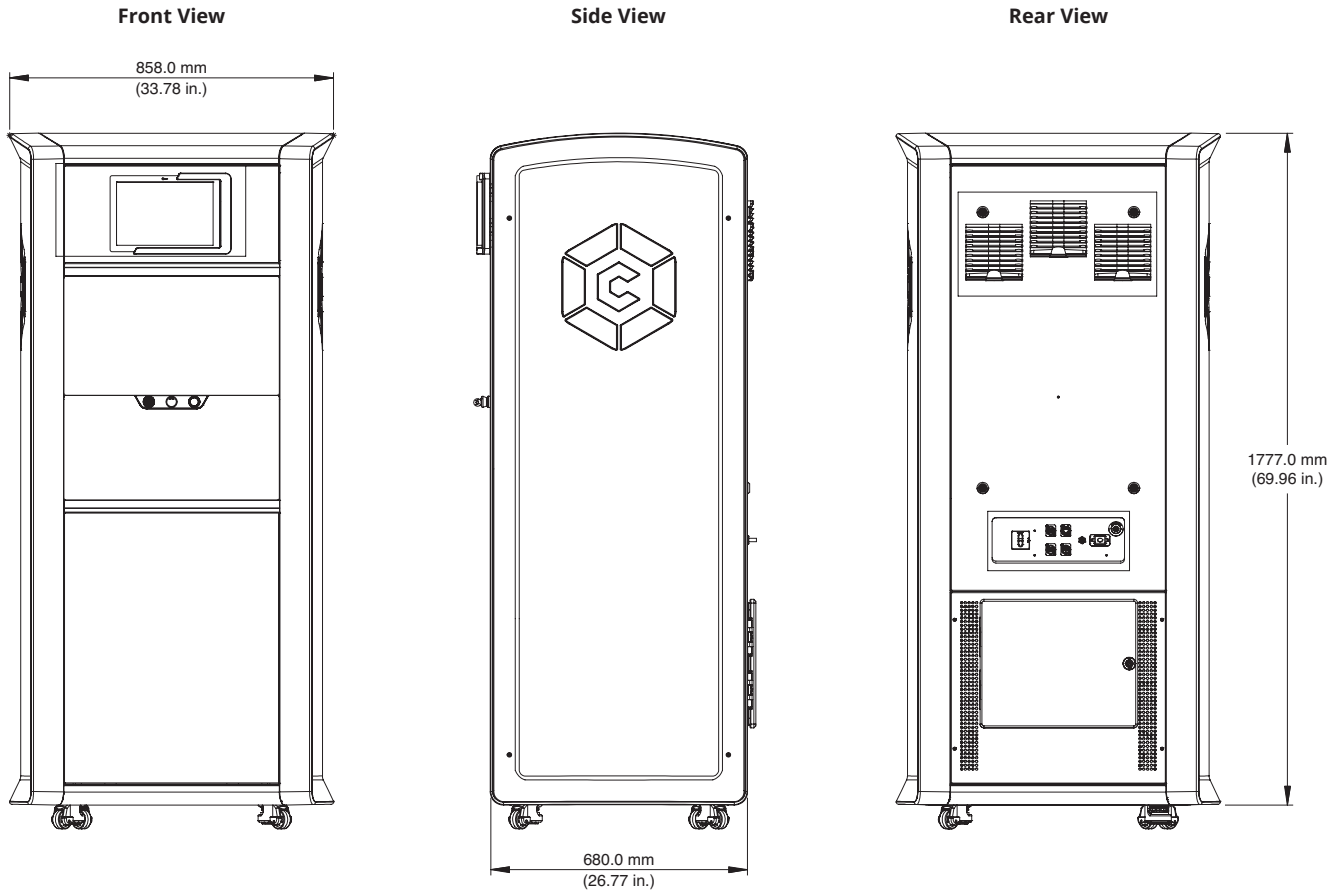
- Dental and Medical
- Jewelry
- Aerospace
- Engineering
- Education

SPECIFICATIONS	CREATOR	CREATOR RA
Laser Power Type	Yb: Fiber 250 W	
Laser Wavelength (nm)	1070	
Building Platform/Volume (diameter x height)	100 mm x 110 mm (3.9 x 4.3 in.)	
Reservoir Volume	110 mm x 200 mm (4.3 x 7.9 in.)	
Material Deposition	Scraper	
Repeatability (\pm μ m)		
x:	15	
y:	15	
z:	15	
Minimum Feature Size (μ m)		
x:	80	
y:	80	
z:	20	
Typical Accuracy (μ m)	40	
Ready-to-run Materials with Developed Print Parameters	Stainless Steel 17-4 PH; Cobalt-Chrome; CoCr Bronze CuSn8	Titanium Ti6Al4V; AlSi10Mg; Non-Reactive Materials
Extraction Unit	Non-Reactive Materials	Reactive and Non-Reactive Materials
SPACE REQUIREMENTS		
Dimensions	717 mm x 858 mm x 1794 mm (28.2 x 33.8 x 70.6 in.)	
Weight	470 kg (1036.2 lb)	400 kg (881.8 lb)
FACILITY REQUIREMENTS		
Electrical Requirements	110 V to 230 V/1 Ph/50 Hz/16 A	230 V/1 Ph/50 Hz/16 A
Compressed Air Requirements	No	
Gas Requirements	Nitrogen/Argon	
Cooling	Air	
CONTROL SYSTEM AND SOFTWARE		
Software Tools	APP SUITE™	
Control Software	CREATOR Controller	
Operating System	Microsoft Windows	
Input Data File Formats	STL, STEP, IGES, Object	
Network Type and Protocol	Ethernet	
ACCESSORIES		
Recycling System	Optional	
HANDLING		
Material Loading	Manual	

SYSTEM	CREATOR					
	CREATOR RA					
MATERIAL	Tool Steel and Stainless Steel	Co-Alloys	Ni-Alloys	Cu-Alloys	Al-Alloys	Ti-Alloys
MATERIAL PROPERTIES	High Hardness and Toughness	High Strength	High Corrosion Resistance	High Corrosion Resistance	Good Processability	High Corrosion Resistance
	High Corrosion Resistance	High Toughness	Increased Strength	Good Machinability	Good Electrical Conductivity	Good Machinability
	Good Machinability	Good Corrosion Resistance	Good Anti-friction	High Strength, Low Weight	Good Alloying Properties	High Strength, Low Weight
		Good Bio Compatibility	Excellent Mechanical Strength	Good Bio Compatibility	Light Weight	Good Bio Compatibility
APPLICATION FIELDS	Medical Implants	Dental	Aerospace	Aerospace	Automotive	Aerospace
	Spindles and Screws	Medical Implants	Rocket Motors	Automotive	Industrial	Maritime
	Pressure Die Casting Molds	High Temperature	Pumps	Jewelry and Watchmaking	Aerospace	Motor Sport
	Maritime		Tooling	Industries		Bio Materials for Implants
	Aerospace		Gas Turbines	Medical Sector		
			Reactors			

MECHANICAL SPECIFICATIONS

CREATOR



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Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice.

Coherent offers a limited warranty for all CREATOR 3D Printers. For full details of this warranty coverage, please refer to the Service section at www.coherent.com or contact your local Sales or Service Representative. MC-030-18-0M0119Rev.A Copyright ©2019 Coherent, Inc.

