


ORLAS CREATOR®

ORLAS CREATOR® RA

Specifications		
Laser Power Type	Yb: Fiber 250 W	Yb: Fiber 250 W
Laser Wavelength	1070 nm	1070 nm
Building Platform / Volume	100 mm x 110 mm (diameter x height)	100 mm x 110 mm (diameter x height)
Material Deposition	Scraper	Scraper
Repeatability	x=15 µm, y=15 µm, z=15 µm	x=15 µm, y=15 µm, z=15 µm
Minimum Feature Size	x=80 µm, y=80 µm, z=20 µm	x=80 µm, y=80 µm, z=20 µm
Typical Accuracy	40 µm	40 µm
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	717 mm x 858 mm x 1794 mm
Weight	350 Kg	360 Kg
Facility Requirements		
Electrical Requirements	230 V/1 Ph/50 Hz/16 A	230 V/1 Ph/50 Hz/16 A
Compressed Air Requirements	No	No
Gas Requirements	Nitrogen / Argon	Nitrogen / Argon
Cooling	Air Cooling	Air Cooling
Control System and Software		
Software Tools	ORLAS SUITE®	ORLAS SUITE®
Control Software	CREATOR Controller	CREATOR Controller
Operating System	Microsoft Windows	Microsoft Windows
Input Data File Formats	STL, STEP, IGES, Object	STL, STEP, IGES, Object
Network Type and Protocol	Ethernet	Ethernet
Accessories		
Recycling System	Optional	Optional
Optional Accessories	Sand Blasting System, Sieving Unit	Sand Blasting System, Sieving Unit
Handling		
Material Loading	Manual	Manual
Certification		
	CE	CE

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	Tool Steel and Stainless Steel	Co-Alloys	Ni-Alloys	Cu-Alloys	Al-Alloys	Ti-Alloys
MATERIAL PROPERTIES	<ul style="list-style-type: none"> ✓ High hardness and toughness ✓ High corrosion resistance ✓ Good machinability 	<ul style="list-style-type: none"> ✓ High strength ✓ High toughness ✓ Good corrosion resistance ✓ Good bio compatibility 	<ul style="list-style-type: none"> ✓ High corrosion resistance ✓ Increased strength ✓ Good anti-friction ✓ Excellent mechanical strength 	<ul style="list-style-type: none"> ✓ High corrosion resistance ✓ Good machinability ✓ High strength, low weight ✓ Good bio compatibility ✓ Low thermal expansion 	<ul style="list-style-type: none"> ✓ Good processability ✓ Good electrical conductivity ✓ Good alloying properties ✓ Light weight 	<ul style="list-style-type: none"> ✓ High corrosion resistance ✓ Good machinability ✓ High strength, low weight ✓ Good bio compatibility ✓ Low thermal expansion
APPLICATION FIELDS	<ul style="list-style-type: none"> ✓ Medical implants ✓ Spindles and screws ✓ Pressure die casting moulds ✓ Maritime ✓ Aerospace 	<ul style="list-style-type: none"> ✓ Dental ✓ Medical implants ✓ High Temperature 	<ul style="list-style-type: none"> ✓ Aerospace ✓ Rocket Motors ✓ Pumps ✓ Tooling ✓ Gas turbines ✓ Reactors 	<ul style="list-style-type: none"> ✓ Aerospace ✓ Automotive ✓ Jewellery and Watchmaking ✓ Industries ✓ Medical sector 	<ul style="list-style-type: none"> ✓ Automotive ✓ Industrial applications ✓ Aerospace 	<ul style="list-style-type: none"> ✓ Aerospace ✓ Maritime applications ✓ Motor sport ✓ Bio materials for implants
ALLOYS	<ul style="list-style-type: none"> ✓ MetcoAdd 17-4PH-A (Oerlikon) ✓ MetcoAdd 316L-A (Oerlikon) ✓ 1.4404 (Heraeus) 	<ul style="list-style-type: none"> ✓ MetcoAdd 75A (Oerlikon) ✓ MetcoAdd 76A (Oerlikon) ✓ MetcoAdd 78A (Oerlikon) ✓ Wirobond C+ (BEGO) 	<ul style="list-style-type: none"> ✓ MetcoAdd 718A (Oerlikon) ✓ MetcoAdd 718B (Oerlikon) ✓ MetcoAdd 625A (Oerlikon) ✓ MetcoAdd HX-A (Oerlikon) 	<ul style="list-style-type: none"> ✓ CuSn8 (Heraeus) 	<ul style="list-style-type: none"> ✓ AlSi10Mg (Heraeus) 	<ul style="list-style-type: none"> ✓ Ti48Al2Cr2Nb (Heraeus) ✓ Ti6Al4V (Heraeus)