


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) |