UNIST
3D프린팅융합기술센터 장비 현황

METAL
3D PRINTER

SUS316L · AlSi10Mg · IN718 · Ti64 · MS1

Center for Advanced Additive Manufacturing × UNIST

Powder Bed Fusion

- M 290
- M 300-4
- SLM®500
- Mlab 200R

Direct Energy Deposition

- MX-600
- Multi Axis Robot System
  Metal WAAM/WLAM 3D Printer

M 290

TECHNICAL DATA	
Manufacturer	EOS Gmbh
Building Volume	250 x 250 x 325 mm
Laser Type	1 x 400 W, Yb-fiber Laser
Laser Beam Diameter	100 µm
Scan Speed	Max 7.0 m/s
Layer Thickness	10 - 100 µm
Process Method	Powder Bed Fusion
SOFTWARE	
EOSPRINT incl. , EOS ParameterEditor, Materialise Magics	
MATERIALS	
Maraging Steel, etc.	

M 300-4

TECHNICAL DATA	
Manufacturer	EOS Gmbh
Building Volume	300 x 300 x 400 mm
Laser Type	4 x 400 W, Yb-fiber Laser
Laser Beam Diameter	100 µm
Scan Speed	Max 10.0 m/s
Layer Thickness	10 - 100 µm
Process Method	Powder Bed Fusion
SOFTWARE	
EOSPRINT 2, EOS ParameterEditor, Materialise Magics	
MATERIALS	
AlSi10Mg	

SLM®500

TECHNICAL DATA	
Manufacturer	Nikon SLM Solution
Building Volume	500 x 280 x 365 mm
Laser Type	4 x 400 W, Yb-fiber Laser
Laser Beam Diameter	80 - 115 µm
Scan Speed	Max 10.0 m/s
Layer Thickness	20 - 90 µm
Process Method	Powder Bed Fusion
SOFTWARE	
Materialise Magics	
MATERIALS	
INCONEL718, SUS316L	

Mlab 200R

TECHNICAL DATA	
Manufacturer	Colibrium Additive
Building Volume	100 x 100 x 100 mm
Laser Type	1 x 200 W, Yb-fiber Laser
Laser Beam Diameter	75 µm
Scan Speed	Max 7.0 m/s
Layer Thickness	15 - 30 µm
Process Method	Powder Bed Fusion
SOFTWARE	
Materialise Magics	
MATERIALS	
Ti-6Al-4V-Gr 23	

MX-600

TECHNICAL DATA	
Manufacturer	InssTek
Building Volume	450 x 600 x 380 mm
Building Rate	4.7 cm³/h
Layer Thickness	250 μm
Power Feed Speed	0.8 - 6.8 g/min
Process Method	Direct Energy Deposition
SOFTWARE	
Materialise Magics insstek	
MATERIALS	
SUS316L, etc.	

Multi Axis Robot System Metal WAAM/WLAM 3D Printer

TECHNICAL DATA	
Manufacturer	3D Factory
Maximum Reach	2,701 mm
Maximum Payload	167 kg
Rated Payload	120 kg
Pose Repeatability (ISO 9283)	-0.05~0.05 mm
Number of Axes	6
Mounting Position	Floor
Build Size	Up to 2,000 mm
Process Method	Direct Energy Deposition
SOFTWARE	
AI Build	
MATERIALS	
Aluminum, Tool Steel, Stainless Steel, Nickel Alloy