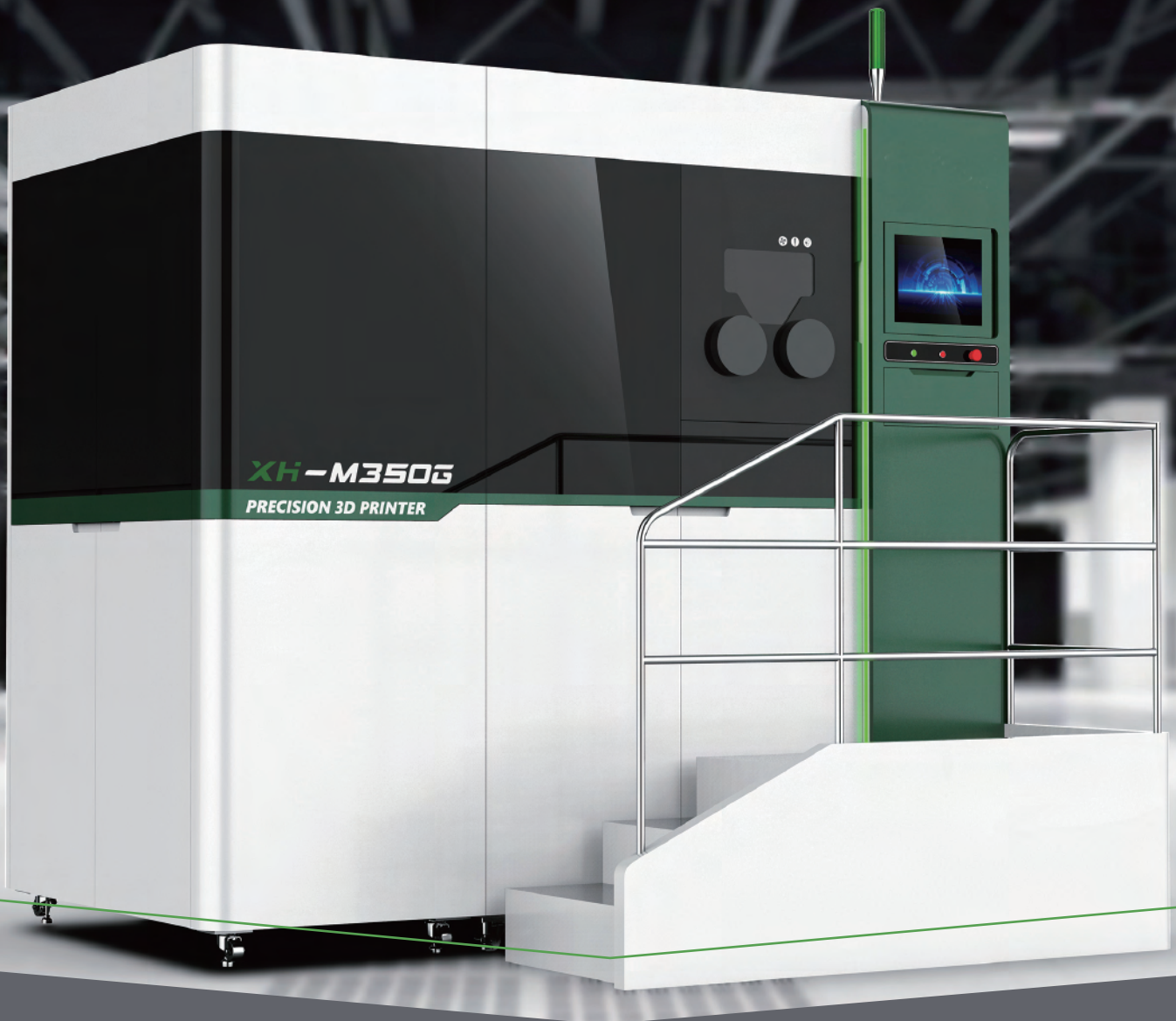


# Green Laser Metal Printing Solution Provider

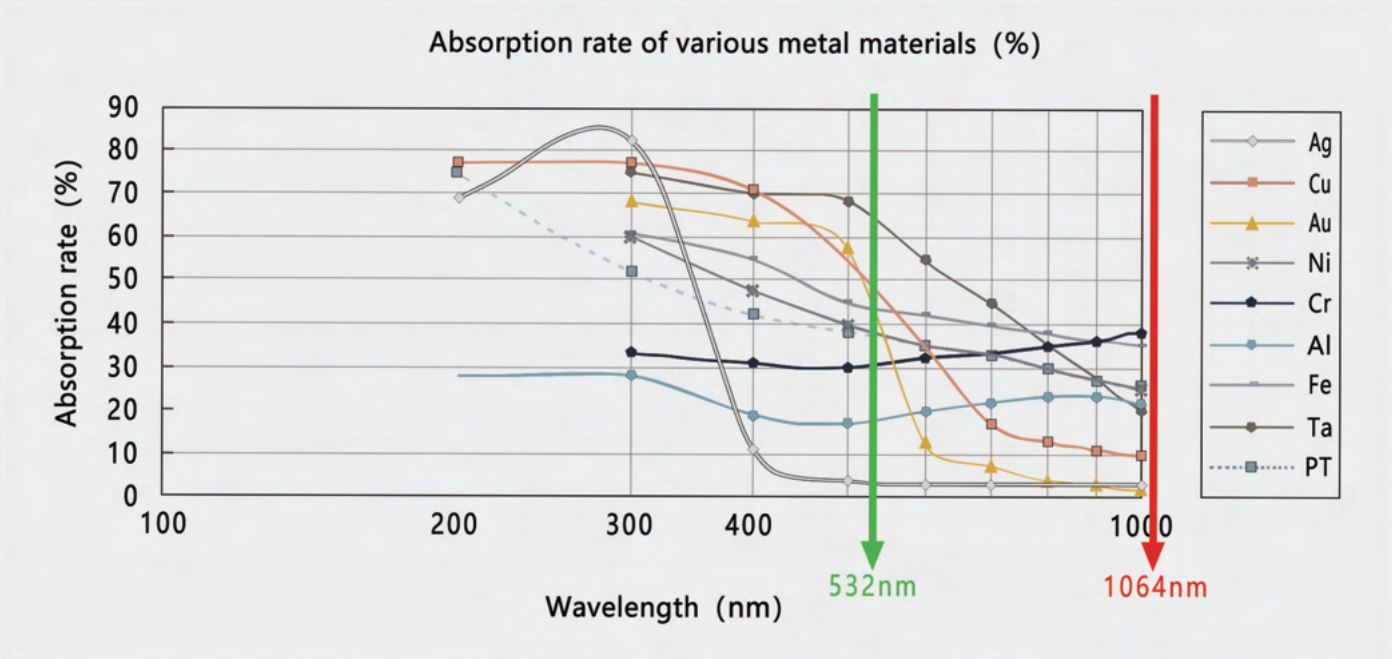


For a Greener Print

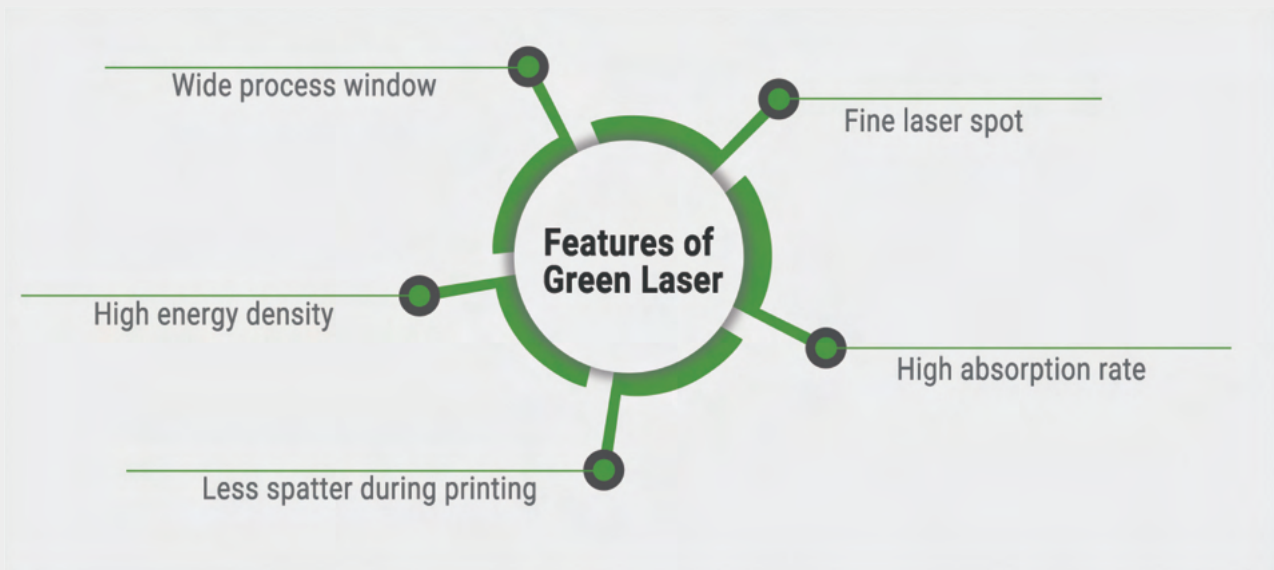
## 그린 레이저로 완성된 첨단 금속 3D프린터

- ▶ 순수 구리를 포함한 고 반사성 금속 3D프린팅
- ▶ 내화성 금속 3D프린팅
- ▶ 초 고해상도 출력지원으로 미세형상 3D프린팅 실현

### Advantages of Green Laser



- ▶ 구리 기반 소재는 단파장 그린 레이저 영역에서 근적외선(NIR) 레이저 대비 약 10배 높은 흡수율을 보입니다.
- ▶ 그린 레이저는 단파장 특성과 함께 고출력 및 우수한 레이저 빔 품질을 동시에 구현할 수 있습니다.



- ▶ 순수 구리 및 구리 합금에서의 탁월한 프린팅 성능



전기 전도성  
≈100%IACS



열 전도성  
≈390Wm<sup>-1</sup>K<sup>-1</sup>



밀도  
≥99.8%

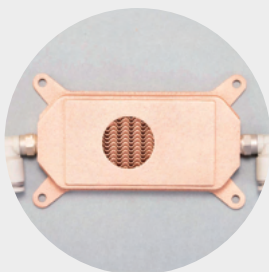
## Applications

For a Greener Print

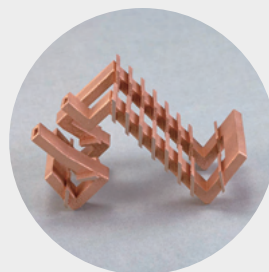
### Pure Copper



Heat Sink Baseplate



Liquid Cold Plate

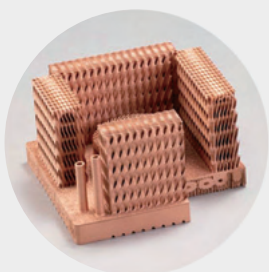


High Frequency Induction Heating Coil



Thrust Chamber

Inside Channel Width : 0.45mm



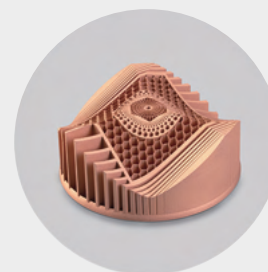
LoreaFin Structure Display

Fin thickness: 0.5mm



Complex Internal Spiral Channels

Min. Fin Wall Thickness: 0.5mm



Copper Printed Structures

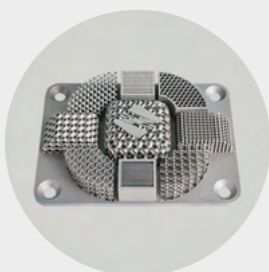
Min. Hole Diameter: 0.3mm

### Copper Alloy & Common metals



Grid Structure

Material: Stainless Steel  
Wall Thickness: 0.06 mm



Lattice Structure

Material: Titanium Alloy  
Wall Thickness: 0.06 mm



Combustion Chamber

Material: CuCrZr  
Flow Channel: 1mm \* 1.35mm



Engine Nozzle

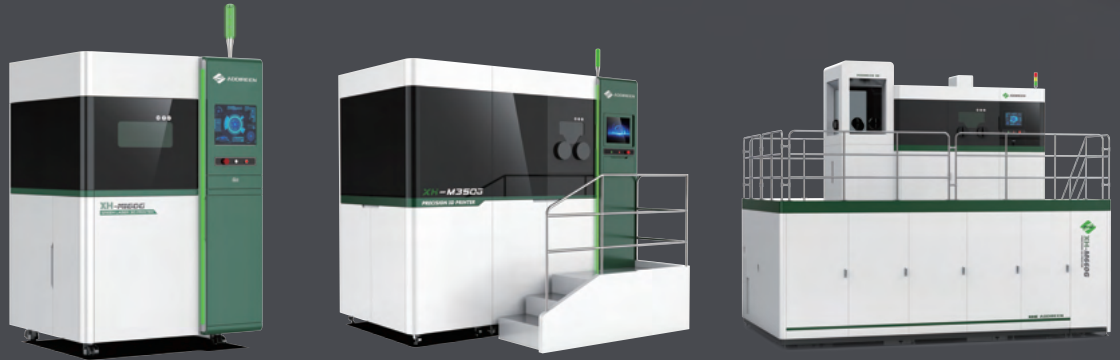
Material: CuCrZr  
Bottom Blade Thickness: 0.7mm

### Jewelry

Gold, Platinum, Silver



## Specification



Model	XH-M160G	XH-M350G	XH-M660G
Build Volume	160 * 160 * 200 mm	350 * 350 * 500 mm	660 * 660 * 1300 mm
Laser	Single Green Laser (500W/700W)	Single/Dual Green Laser (500W/700W/1000W)	Multi Green Laser System (500W/700W/1000W)
Continuous Green Fiber Laser, Wavelength 532nm			
Spot Diameter	20 - 40 $\mu$ m	40 - 60 $\mu$ m	40 - 60 $\mu$ m
Scanning Speed	8m/s	8m/s	8m/s
Printing Speed	10 - 30 cm <sup>3</sup> /h	10 - 35 cm <sup>3</sup> /h (Single laser) 20 - 55 cm <sup>3</sup> /h (Dual laser)	65 - 140 cm <sup>3</sup> /h
Layer Thickness	20-120 $\mu$ m	20-120 $\mu$ m	20-120 $\mu$ m
Power Supply	AC 380V , 50/60Hz , voltage fluctuation $\leq$ 10%		
	32A 3-phase 5-wire	40A 3-phase 5-wire	100A 3-phase 5-wire
Machine Size	1280*1200*2000mm	3050*1750*2850mm	6325*3815*5268mm
Materials	Pure Copper, Copper Alloys, Platinum, Gold, Silver925, Titanium Alloy, Aluminum Alloy, Stainless Steel, Tungsten, Tantalum, Chromium, Niobium, Molybdenum, Refractory metals, Composite Materials (Cu-based Diamond Composite, Cu-based Graphene), other Common Metal Materials.		