

IDI Laser Services Pte Ltd

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Fiber

SERIES

Fiber Laser cutting Machine

CMA1530-CGE





Machine features

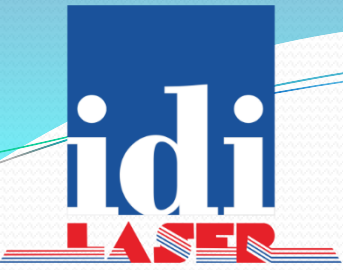
- Equips with IPG laser generator, original imported YYC rack & pinion system(from Taiwan), IGUS electric cable
- High Rigidity Enhanced Aviation Aluminum Gantry, improve the gantry strength and rigidity and much lighter,
- Finite element analysis of gantry help to achieve the best critical state of dynamic performance,
- SMC(Ultra High Pressure Solenoid Valve), Siemens, Schneider Electric components, REXROTH(precision electronic control proportional valve)
- High reflective material available (Brass/Aluminum/Cooper etc.)





Specification

Model	CMA1530C-G-E
Working Area	3000mm×1500mm
Laser Source	IPG
Laser Type	Fiber Laser
Laser Power	500/700/1000/1500/2000W (Optional)
Transmission System	Dual-servo Motor Gantry
Lubrication System	Automatic Lubrication(Lubrication reminder available)
Max Speed	80m/min
Max Acceleration Speed	0.8G
Positioning Accuracy	±0.03mm/1000mm
Repeat Positioning Accuracy	±0.02mm/1000mm
Supported Graphics	CAD, DXF etc.
Working Environment	0-40°C Humidity ≤ 80%, no condensation
Power Consumption	18KW
Power Supply	3 Phases 380V/50Hz/60Hz
Dimension	5400mm×2200mm×2000mm
Weight	4000kg



Laser Source-IPG

- The IPG Photonics YLR/YLS-Series fiber lasers are efficient reliable maintenance-free high power lasers.
- IPG lasers are a diode-pumped Ytterbium fiber laser
- Output powers ranging from 1W up to 1.5KW (YLR-Series), 1KW up to 8KW(YLS-Series), 1060 - 1100 nm wavelength.
- The YLR-Series fiber lasers can be air or water-cooled. The wall plug efficiency for a fiber laser is typically exceeds 30 percent.
- All YLR-Series fiber lasers are Class 4 laser products and are designed and tested with important safety standards.
- YLS-Series enjoy aftersales service globally





SMC(Solenoid Valve)



SMC(Ultra High Pressure Solenoid Valve support up to 3Mpa, fast on-off response speed.

IGUS Cable



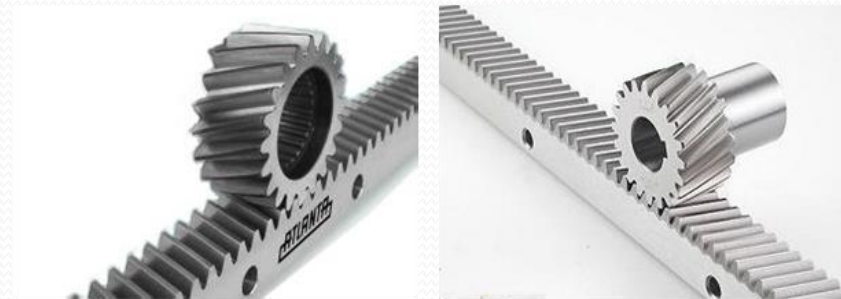
IGUS High flexible cable, suits for long term working in chains.

MOTOREDUCER Planetary Gearbox



Excellent Performances,
high torsional stiffness, low noise, low backlash

Atlanta/YYC Rack & Pinion



Schneider servo motor



The Schneider servo motor enjoy fast dynamic response speed and performances stably, It has high inertia and large torque output, It has three control modes: position, torque and speed control.

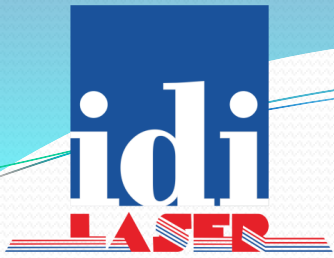
REXROTH



precision electronic control proportional valve
0~1Mpa, control O₂ Pressure, help to cut thick carbon steel.



Ultra high pressure electronic control proportional valve
0~5Mpa, control N₂ Pressure, help to cut stainless steel.
Automatic switch for O₂/N₂ and high pressure air, CNC control gas pressure

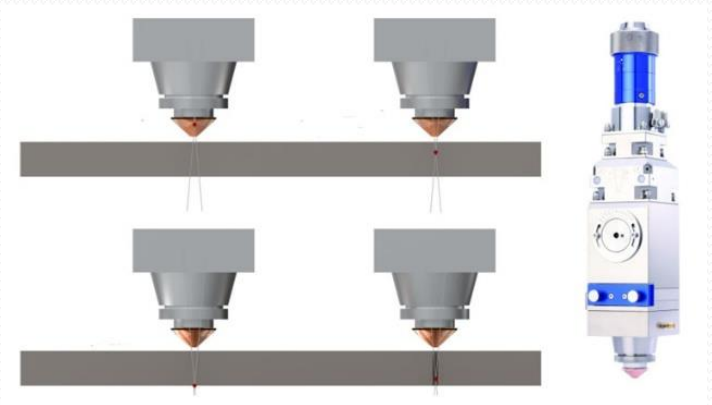


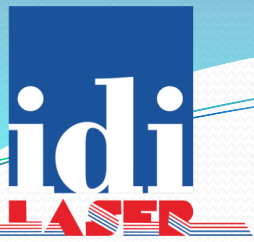
Software

- Support AI/PLT/Gerber formats, accept Mater Cam, Type3 output international standard G code,
- Lead-in/out, cutting compensation, micro-joint, bridging, back entry, gap cutting etc.,
- Multiple piercing methods available, separated laser power/frequency/ gas type/ gas pressure/ height track can be set during cutting and piercing,
- WIFI remote control panel

Auto-focus cutting head

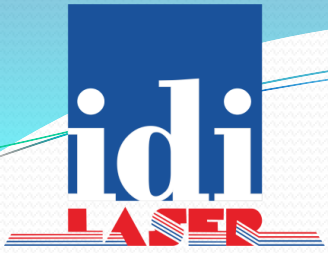
- Z-axis motor control focus system, piercing time 80% less, suitable for thick metal
- Cutting patterns library will be available for operator





Cutting ability

Material	Thickness(mm)	IPG 1000W	
		Speed: m/min	Gas
SS	1	22	N ₂
SS	1.5	11	N ₂
SS	2	6	N ₂
SS	3	2.5	N ₂
SS	4	1.2	N ₂
SS	6	0.6	N ₂
CS	3	3.5	O ₂
CS	6	1.6	O ₂
CS	8	1	O ₂
CS	10	0.8	O ₂
CS	12	0.7	O ₂
Al	1	22	N ₂
Al	2	5	N ₂
Al	3	2	N ₂
Brass	1	10	N ₂
Brass	2	4	N ₂
Brass	3	1.3	N ₂
SGCC	1	20	N ₂
SGCC	1	22	AIR
SGCC	2	5	N ₂
SGCC	2	5.5	AIR
SGCC	3	2	N ₂
SGCC	3	2.2	AIR



Applications & Samples

Metal materials :

Carbon steel, Stainless steel, Aluminum alloy, Titanium alloy, Galvanize sheet, Brass, Red copper etc.



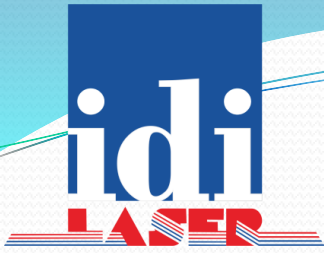
6mm CS



8mm CS



3mm Brass



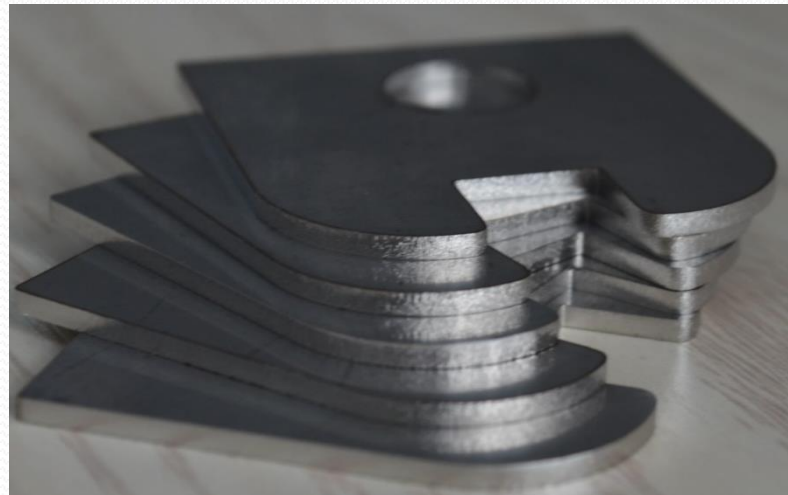
Applications & Samples

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2mm SS



3mm SS