



Fiber

SERIES

Fiber Laser cutting Machine

CMA1530-CGE

PRODUCT RECOMMENDATION

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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/Copper etc.)



Picture only for reference in kind prevail

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℃ 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



Picture only for reference in kind prevail

SMC(Solenoid Valve)



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

MOTOREDUCER Planetary Gearbox



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

IGUS Cable



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

YYC (Rack & Pinion System)



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



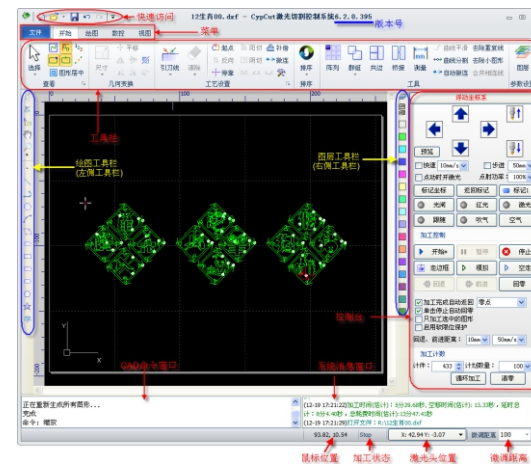
precision electronic control
proportional valve
0~1Mpa, control O₂ Pressure,
help to cut thick carbon steel.



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

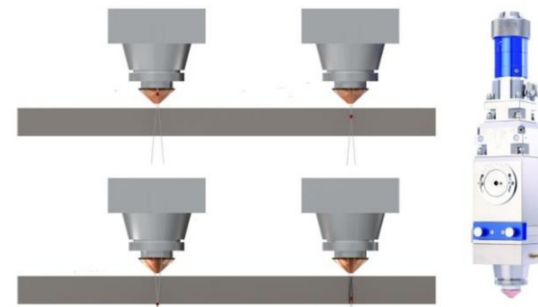
Software

- 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



Available Functions-(according to contract detailed requests, some are optional)

1. **Automatic lubrication:** the lubrication time period can be set in the software, to ensure the accuracy of transmission system, operator just need to set up the time break in the software and keep the oil container full.

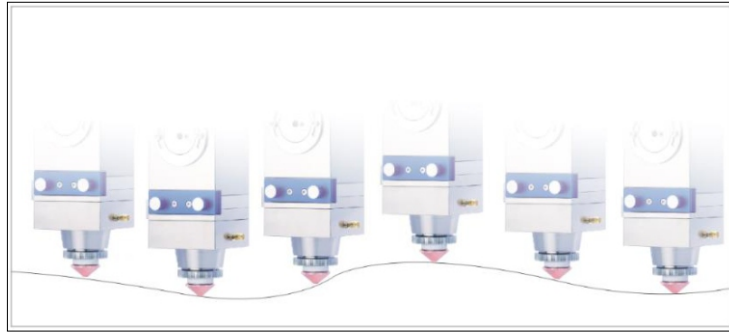


2. **Professional nesting software:** Lantek nesting software is optional for professional customers, special in piercing, sharp corner processing.

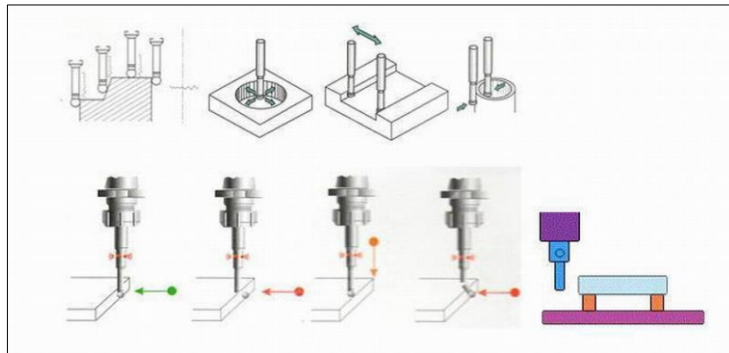
lantek

Available Functions-(according to contract detailed requests, some are optional)

3. Leapfrog function: highly improve the cutting efficiency,

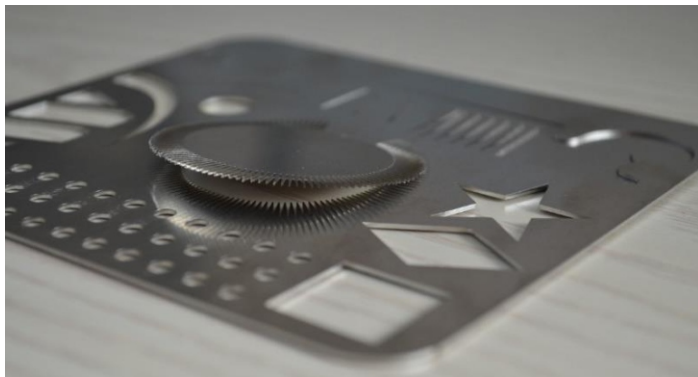


4. Photoelectric edge search : fast location and improve processing efficiency,

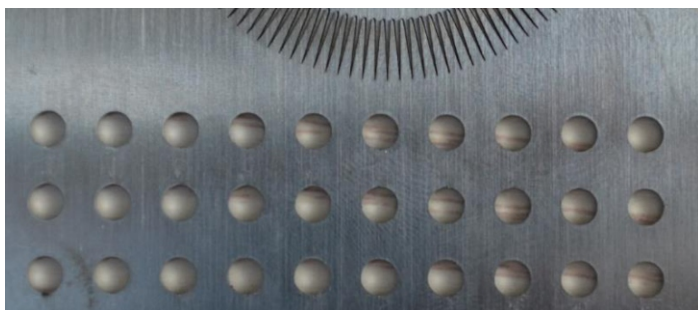


Available Functions-(according to contract detailed requests, some are optional)

5. Power control: allowing corners to be cut with a sharp angle,



6. Flying cut: especially for thin metal sheet, fast cut of matrix patterns,



Available Functions-(according to contract detailed requests, some are optional)

7. Auto focus cutting head: Z-axis motor control focus system, piercing time 80% less, suitable for thick metal



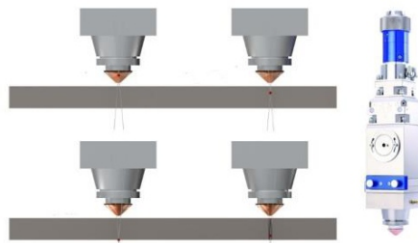
PRECITEC



WSX



8. Sprint laser piercing : This helps to keep the optics clean and improves the cutting process by pushing vaporised and liquified material out through the kerf, especially for the thick sheet metal



Cutting ability -(for reference only, the real cutting speed depends on the material and gas)

IPG 500W			
material	thickness/mm	speed: m/min	GAS
SS	1	9~10	N ₂
SS	1.5	3~4.5	N ₂
SS	2	1.5~2.5	N ₂
SS	3	0.5~0.8	N ₂
SS	1	9.5~10.5	Air
SS	1.5	5~5.5	Air
SS	2	2~2.5	Air
CS	1	7~9	O ₂
CS	2	3.5~4.5	O ₂
CS	3	1.5~2.5	O ₂
CS	5	0.6~1	O ₂
CS	2	2~2.5	Air
CS	3	0.5~0.85	Air

Cutting ability -(for reference only, the real cutting speed depends on the material and gas)

IPG 700W			
material	thickness/mm	speed: m/min	GAS
SS	1	14~16	N ₂
SS	2	3~4	N ₂
SS	3	1~1.5	N ₂
SS	4	0.6	N ₂
CS	1	14~16	O ₂
CS	2	4~6	O ₂
CS	3	2~3	O ₂
CS	4	1.5~2	O ₂
CS	5	1~1.5	O ₂
CS	6	0.8~1	O ₂
CS	8	0.6~0.8	O ₂
CS	10	0.3~0.6	O ₂
AL	1	10	Air
AL	2	3.5	Air
AL	3	0.8	Air
BRASS	1.5	2	N ₂

Cutting ability -(for reference only, the real cutting speed depends on the material and gas)

Material	Thickness(mm)	IPG 1000W	
		Speed: m/min	Gas
SS	1	22	N2
SS	1.5	11	N2
SS	2	6	N2
SS	3	2.5	N2
SS	4	1.2	N2
SS	6	0.6	N2
CS	3	3.5	O2
CS	6	1.6	O2
CS	8	1	O2
CS	10	0.8	O2
CS	12	0.7	O2
Al	1	22	N2
Al	2	5	N2
Al	3	2	N2
Brass	1	10	N2
Brass	2	4	N2
Brass	3	1.3	N2
SGCC	1	20	N2
SGCC	1	22	AIR
SGCC	2	5	N2
SGCC	2	5.5	AIR
SGCC	3	2	N2
SGCC	3	2.2	AIR

Cutting ability-(for reference only, the real cutting speed depends on the material and gas)

IPG -1500W			
Material	Thickness(mm)	Speed (m/min)	Gas
CS	1.5	19.2	O ₂
CS	2	8.4	O ₂
CS	3	4.8	O ₂
CS	4.7	2.1	O ₂
CS	5.7	2	O ₂
CS	7.8	1.5	O ₂
CS	9.7	1.32	O ₂
CS	13.8	0.72	O ₂
CS	16	0.7	O ₂
SS	1	45.6	N ₂
SS	1.8	19.2	N ₂
SS	2.8	4.8	N ₂
SS	4.6	1.8	N ₂
SS	6	0.9	N ₂
SS	7.5	0.3	N ₂
Al	2	7.8	N ₂
Al	3	5.7	N ₂
Al	5	0.78	N ₂
Al	6	0.54	N ₂
Brass	1	33.6	N ₂
Brass	3	2.7	N ₂
Brass	5	0.78	N ₂
Cooper	1	15.6	N ₂
Cooper	3	2.1	N ₂

Cutting ability-(for reference only, the real cutting speed depends on the material and gas)

IPG -2000W			
Material	Thickness(mm)	Speed: m/min	Gas
SS	1	20~28	N2
SS	2	9~13	N2
SS	3	4~6.5	N2
SS	4	3~4.5	N2
SS	6	1.2~1.8	N2
SS	8	0.7~1.0	N2
SS	10	0.5~0.6	N2
CS	3	3~4.6	O2
CS	5	2.7~3.1	O2
CS	6	2.0~2.8	O2
CS	8	1.4~2.0	O2
CS	10	1.1~1.4	O2
CS	12	0.9~1.2	O2
CS	16	0.6~0.75	O2
CS	20	0.4~0.5	O2
Al	3	4~6	N2
Al	4	2.5~3.5	N2
Al	5	1.4~1.8	N2
Al	6	0.8~1.2	N2
Al	8	0.6~0.8	N2

Available configurations-(according to contract detailed requests, some are optional)

No. Item	description		Place of origin
1 Laser brand	IPG		Germany
2 Laser power	500~2000W		Germany
3 High rigidity body	3000mmx1500mm, Precision gantry milling, Secondary annealing, Laser interferometer calibration,		Han's YUEMING
4 Cutting head	Auto focus(Optional)		China/Germany (optional)
5 Lens	F=125mm ; dual-lens to avoid <i>Spherical Aberration</i> and ensure the cutting edge smooth		Israel-Ophir
6 Nesting software	Professional for sheet metal and tube cutting and highly integration of automation		Spain-Lantek
7 Gantry	Optimized by finite element analysis High rigidity Cast Aviation Aluminum Gantry, improve the gantry strength and rigidity and much lighter		Han's YUEMING
8 Rack	Grinding grade precision rack		TAIWAN-YYC
9 Gear	High frequency quenching		TAIWAN-YYC
10 Rail	Heavy Duty Precision type		TAIWAN-CSK
11 Servo motor	2000W		Schneider
12 Lubrication system	Automatic		Han's YUEMING
13 Shuttle tables	No		Han's YUEMING

Available configurations-(according to contract detailed requests, some are optional)

No.	Item	Description	Place of Origin
14	pressure electronic control proportional valve	0~1.0MPa	REXROTH-Germany
15	High-pressure switch	0~2.5MPa, pressure alarm, Gas consumption reminder	China
16	Reducer	Planetary gearbox	MOTOREDUCER-France
17	PC	Lenovo	China
18	Closed-loop control system	Leapfrog, Sprint piercing, Photoelectric edge search function	China
19	Software	SmartCutting STD	Han's Yueming
20	Electrical system	Siemens, Schneider(core components)	Germany
21	Chiller	Dual-temperature control	TONGFEI-China
22	Exhauster	380V/50Hz/3KW/2900rpm	HUADA-China
23	Stabilizer	60~100KVA	China
24	Ultra high pressure air compressor & filter	35VH-0.7/30, 30KG、refrigeration dryer, 4-level filter system, to keep the compressed air clean enough(no oil/dust/water) though the lens	China
25	Ultra high pressure electronic control proportional valve	0~5MPa, Automatic switch for O2/N2 and high pressure air, CNC control gas pressure(Optional)	REXROTH-Germany

Applications & Samples

Metal materials :

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



6mm CS



8mm CS

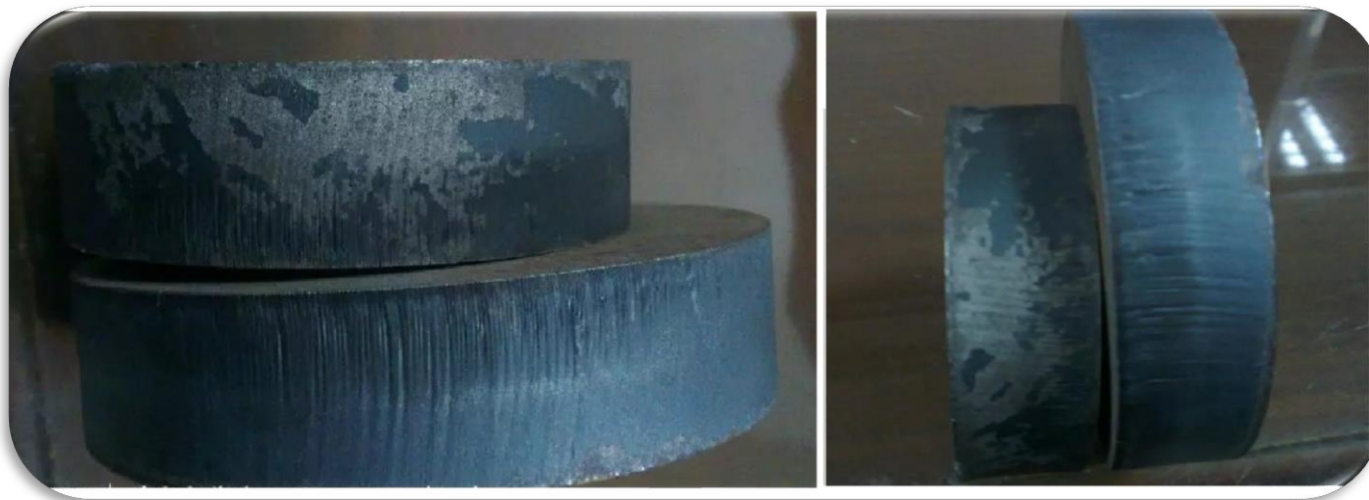


3mm Brass

Applications & Samples

Metal materials :

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



20mm CS

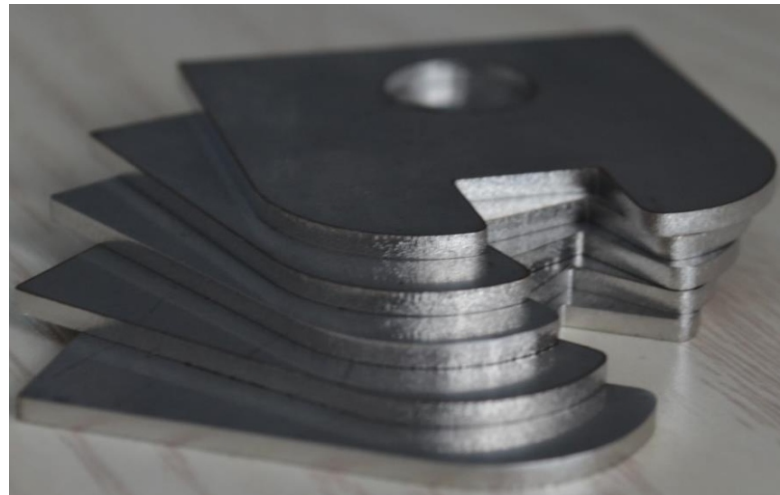
Applications & Samples

Metal materials :

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



2mm SS



3mm SS

Applications & Samples

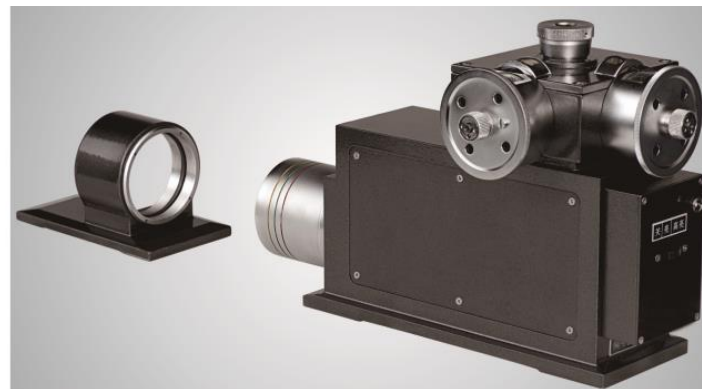
Applicable Industries:

Metal advertising characters, metal cabinets, Stainless steel cutlery, elevator, automobile parts,





OPTODYNE Laser interferometer (USA)



Dual-direction Autocollimator



Adopts coordinate measuring machine to guarantee spare parts precision



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