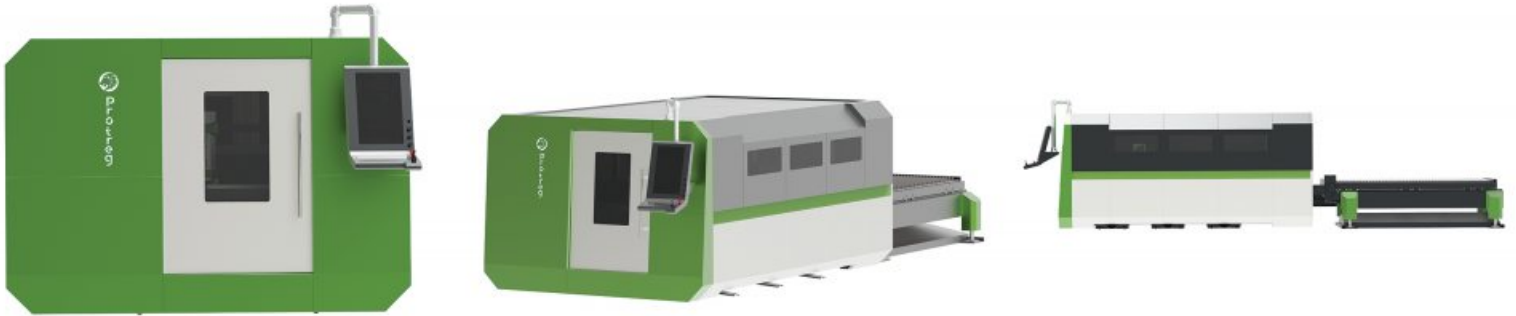




Closed Series GAMA

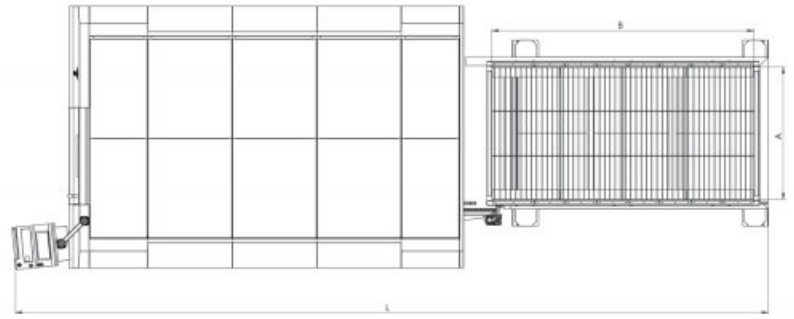
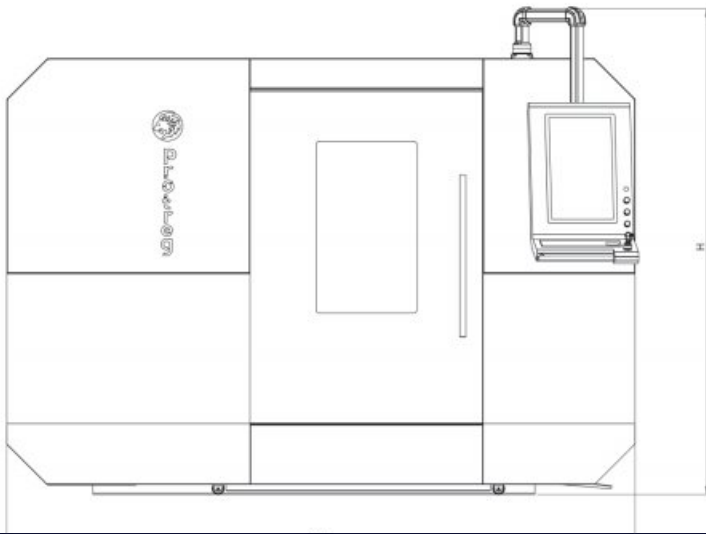
LASER

- 21" LCD Industrial Touch Screen
- Windows Based Cnc Controller
- Operator Panel
- Safe Module Inputs and Outputs
- Chiller
- Automatic Height Control System
- Troubleshooting and service opportunity with remote connection
- Automatic lubrication system
- Laser Cutting Head
- 250 mm Standard Stroke
- 3 Axis (X, Y,Z) Movement
- Servo Motor and drivers set
- Planetary Gearbox
- High Precision Linear Rails
- High Precision Helix Gear and Creamer
- Cable Channels on X,Y, Z Axes
- Table with Cnc Controlled Hydraulic System
- Fixed Control Panel System
- 3 Emergency Buttons
- Nesting Program



RESONATOR SPECIFICATIONS

Resonator	watt	4000	6000	8000	10000	12000	15000
Multi-mode BPP	rad	2.0, 3.3, 5.0, 6.0				2.0, 3.3, 5.0, 6.0	
Power Stability	%	±2	± 2	± 2	± 2	± 2	± 2
Single-mode Fiber Core	µm	50, 100, 150, 200				<2.2 @ 50 µm, 2.0 typ., <4.0 @ 100 µm, 3.3 typ., <6.0 @ 150 µm, 5.0 typ., <8.0 @ 200 µm, 6.0 typ.	
Coolant flow rate	l/min	2				2	
Thickness	-	-	-	-	-	-	-
BLACK STEEL (S235JR, S355MC)	mm	20	25	25	30	30	-
STAINLESS STEEL (AISI 304)	mm	10	12	14	20	25	-
ALUMINUM (ALMG3)	mm	10	12	14	20	25	-
COPPER (CU-ETP)	mm	6	8	12	16	20	-
COPPER (CUZN37)	mm	6	8	12	16	20	-
Maximum Modulation Rate	kHz	50	50	50	50	50	50
Wavelength	nm	1074 ± 6				1070 ± 5	
Auxiliary Gases	-						
OXYGEN	-					0,5-6 Bar	
AZOTE	-					0,5-25 Bar	
DRY AIR	-					0,5-25 Bar	



CLOSED LASER SERIES COMPACT TYPE CUTTING MACHINES

TECHNICAL SPECIFICATIONS

Working Area	mm	1500x3000	2000X4000	2000x6000
Max. Loading	kg	1500	2750	4000
Axis movements	-	-	-	-
X,U AXES/SERVO MOTOR TABLE (B)	mm	3220	4370	6570
Y, AXIS/SERVO MOTOR BRIDGE (A)	mm	1590	2090	2090
Z, AXIS/SERVO MOTOR CUTTING HEAD	mm	150	150	150
Acceleration	G	2,5 - 3,5	2,5 - 3,5	2,5 - 3,5
Max. Axis speeds	m/min	169 (Result speed) (X,Y single axis speed 120 meters/min)		
Shuttle	Palet	Automatic (Double Pallet)		
Machine dimensions (LxWxH)	mm	9000x3100x2300	11000x3600x2300	15200x3600x2300
Weight ≈	kg	9000	12500	16000
Machine Axis	-	4 Eksen (X,Y,Z,U)		
Positioning accuracy	mm	±0,1		
Repetition accuracy	mm	±0,05		
CNC	-	✓	✓	✓
CAD-CAM Software	-	✓	✓	✓
Network	-	EtherCAT		
Control Panel	-	21-inch touch screen,Industrial type psl. keyboard,PLC keys		

Laser Cutting Thickness & Speed Chart

		500W	1000W	1500	2000W	3000W	4000W	6000W	8000W	10000W	12000W
Thick		speed	speed	speed	speed	speed	speed	speed	speed	speed	speed
		m/min	m/min	m/min	m/min	m/min	m/min	m/min	m/min	m/min	m/min
Carbon Steel (Q235A)	1	7.0-9.0	8.0-10	15-26	24-30	30-40	33-42	35-42	35-42	35-42	35-42
	2	3.0-4.5	4.0-6.5	4.5-7.0	4.7-6.0	4.8-7.5	5.2-8.0	6.0-8.0	6.2-10	7.0-12	10-13
	3	1.8-3.0	2.4-3.0	2.6-4.0	3.0-4.8	3.3-5.0	3.5-5.5	3.8-6.5	4.0-7.0	4.2-7.5	4.5-8.0
	4	1.3-1.5	2.0-2.4	2.5-3.0	2.8-3.5	3.0-4.2	3.1-4.8	3.5-5.0	3.5-5.5	3.5-5.5	3.5-5.5
	5	0.9-1.1	1.5-2.0	2.0-2.5	2.2-3.0	2.6-3.5	2.7-3.6	3.3-4.2	3.3-4.5	3.3-4.5	3.3-4.8
	6	0.6-0.9	1.4-1.6	1.6-2.2	1.8-2.6	2.3-3.2	2.5-3.4	2.8-4.0	3.0-4.2	3.0-4.2	3.0-4.2
	8		0.8-1.2	1.0-1.4	1.2-1.8	1.8-2.6	2.0-3.0	2.2-3.2	2.5-3.5	2.5-3.5	2.5-3.5
	10		0.6-1.0	0.8-1.1	1.1-1.3	1.2-2.0	1.5-2.0	1.8-2.5	2.2-2.7	2.2-2.7	2.2-2.7
	12		0.5-0.8	0.7-1.0	0.9-1.2	1.0-1.6	1.2-1.8	1.2-2.0	1.2-2.1	1.2-2.1	1.2-2.1
	14			0.5-0.7	0.7-0.8	0.9-1.4	0.9-1.2	1.5-1.8	1.7-1.9	1.7-1.9	1.7-1.9
	16				0.6-0.7	0.7-1.0	0.8-1.0	0.8-1.5	0.9-1.7	0.9-1.7	0.9-1.7
	18				0.4-0.6	0.6-0.8	0.65-0.9	0.65-0.9	0.65-0.9	0.65-0.9	0.65-0.9
	20					0.5-0.8	0.6-0.9	0.6-0.9	0.6-0.9	0.6-0.9	0.6-0.9
	22					0.4-0.6	0.5-0.8	0.5-0.8	0.5-0.8	0.5-0.8	0.5-0.8
	25						0.3-0.5	0.3-0.5	0.3-0.7	0.3-0.7	0.3-0.7
Stainless Steel (201)	1	8.0-13	18-25	20-27	24-30	30-35	32-40	45-55	50-66	60-75	70-85
	2	2.4-5.0	7.0-12	8.0-13	9.0-14	13-21	16-28	20-35	30-42	40-55	50-66
	3	0.6-0.8	1.8-2.5	3.0-5.0	4.0-6.5	6.0-10	7.0-15	15-24	20-30	27-38	33-45
	4		1.2-1.3	1.5-2.4	3.0-4.5	4.0-6.0	5.0-8.0	10-16	14-21	18-25	22-32
	5		0.6-0.7	0.7-1.3	1.8-2.5	3.0-5.0	4.0-5.5	8.0-12	12-17	15-22	18-25
	6			0.7-1.0	1.2-2.0	2.0-4.0	2.5-4.5	6.0-9.0	8.0-14.0	12-15	15-21
	8				0.7-1.0	1.5-2.0	1.6-3.0	4.0-5.0	6.0-8.0	8.0-12.0	10-16
	10					0.6-0.8	0.8-1.2	1.8-2.5	3.0-5.0	6.0-8.0	8.0-12
	12					0.4-0.6	0.5-0.8	1.2-1.8	1.8-3.0	3.0-5.0	6.0-8.0
	14						0.4-0.6	0.6-0.8	1.2-1.8	1.8-3.0	3.0-5.0
	20							0.4-0.6	0.6-0.7	1.2-1.8	1.8-3.0
25								0.5-0.6	0.6-0.7	1.2-1.8	
30								0.4-0.5	0.5-0.6	0.6-0.7	
40									0.4-0.5	0.5-0.6	
Aluminum	1	4.0-5.5	6.0-10	10-20	15-25	25-38	35-40	45-55	50-65	60-75	70-85
	2	0.7-1.5	2.8-3.6	5.0-7.0	7-10	10-18	13-25	20-30	25-38	33-45	38-50
	3		0.7-1.5	2.0-4.0	4.0-6.0	6.5-8.0	7.0-13	13-18	20-30	25-35	30-40
	4			1.0-1.5	2.0-3.0	3.5-5.0	4.0-5.5	10-12	13-18	21-30	25-38
	5			0.7-1.0	1.2-1.8	2.5-3.5	3.0-4.5	5.0-8.0	9.0-12	13-20	15-25
	6				0.7-1.0	1.5-2.5	2.0-3.5	4.0-6.0	4.5-8.0	9.0-12	13-18
	8				0.6-0.8	0.7-1.0	0.9-1.6	2.0-3.0	4.0-6.0	4.5-8.0	9.0-12
	10					0.4-0.7	0.6-1.5	1.0-2.0	2.2-3.0	4.0-6.0	4.5-8.0
	12					0.3-0.45	0.4-0.6	0.8-1.4	1.5-2.0	2.2-3.0	4.0-6.0
	16						0.3-0.4	0.6-0.8	1.0-1.6	1.5-2.0	2.2-3.0
	20							0.5-0.7	0.7-1.0	1.0-1.6	1.5-2.0
25								0.5-0.7	0.7-1.0	1.0-1.6	
35									0.5-0.7	0.7-1.0	
Brast	1	4.0-5.5	6.0-10	8.0-13	10-16	20-35	25-30	45-55	55-65	65-75	75-85
	2	0.5-1.0	2.8-3.6	3.0-4.5	4.5-7.5	6.0-10	8.0-12	25-30	30-40	33-45	38-50
	3		0.5-1.0	1.5-2.5	2.5-4.0	4.0-6.0	5.0-6.5	12-18	20-30	25-40	30-50
	4			1.0-1.6	1.5-2.0	3.0-5.0	3.2-5.5	8.0-10	10-18	15-24	25-33
	5			0.5-0.7	0.9-1.2	1.5-2.0	2.0-3.0	4.5-6.0	7.0-9.0	9.0-15	15-24
	6				0.4-0.7	1.0-1.8	1.4-2.0	3.0-4.5	4.5-6.5	7.0-9.0	9.0-15
	8					0.5-0.7	0.7-1.0	1.6-2.2	2.4-4.0	4.5-6.5	7.0-9.0
	10						0.2-0.4	0.8-1.2	1.5-2.2	2.4-4.0	4.5-6.5
	12							0.2-0.4	0.8-1.5	1.5-2.2	2.4-4.0
	14								0.4-0.6	0.6-0.8	0.8-1.5

Note: This table data is for reference only!

1. Different fiber optics, material quality, gases, optical lenses, cutting patterns, etc., will affect the cutting speed and need to be adjusted according to site conditions;
2. The yellow part is nitrogen (pure nitrogen) cutting, the green part is oxygen (pure oxygen) cutting;
3. Laser cutting in the processing of the limit material is inefficient and the effect will be reduced, can not be continuous processing;
4. For the cutting of high anti-corrosive materials such as copper and aluminum, attention should be paid to adjusting the process. It is not recommended to continuously process for a long time.