

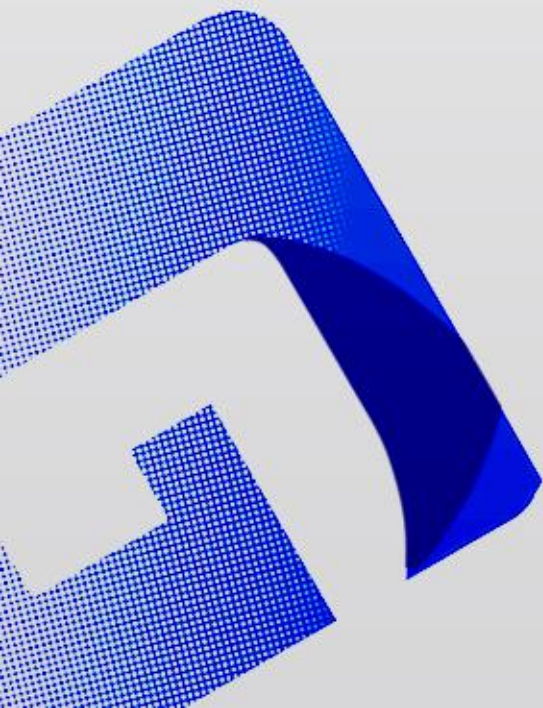


TECHNICAL PROPOSAL

LF4020GAR

1000W-12000W

WHOLE COVER LASER CUTTING MACHINE



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Gold Quality,

Made With Wisdom By GWeike.

Customer-Centric, Quality Supreme

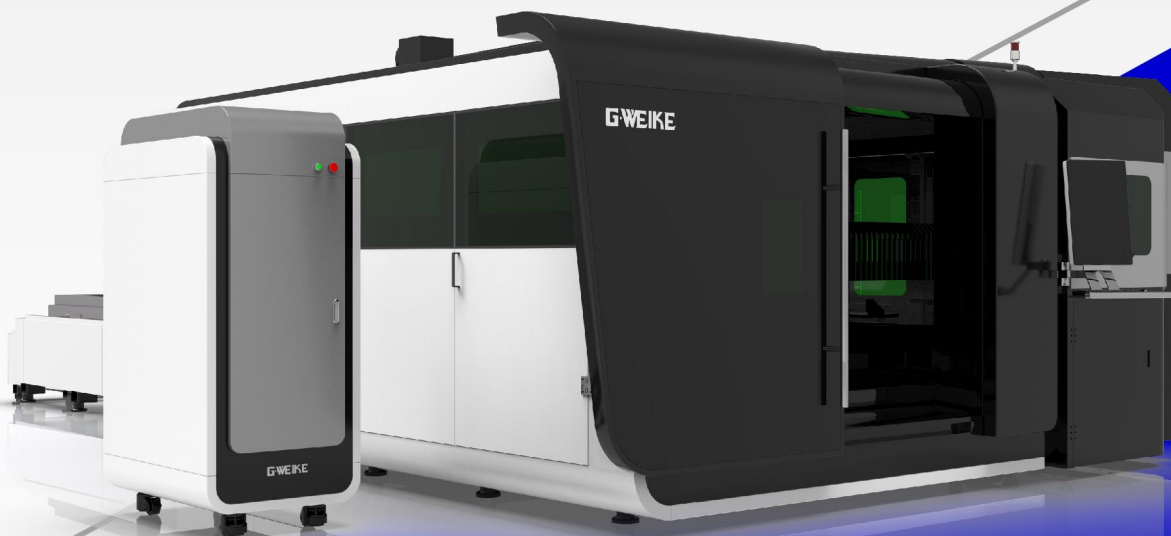


▶ **PRODUCT OVERVIEW**

- GAR Series fiber laser cutting machine can carry up to 12000W laser power, so for most thickness, it is a very good choice.
- For example, agricultural machinery, textile machinery, food machinery and construction machinery and other large machinery and equipment manufacturing, usually use high power fiber laser cutting machine for processing. Suitable for stainless steel, carbon steel, silicon steel, aluminum alloy, titanium alloy, galvanized steel, aluminum-plating zinc plate, copper, and other metals.

▼ **ADVANTAGE**

- High configuration
- CE protection standard
- Pneumatic chuck





▶ TECHNICAL PARAMETERS

Model	LF4020GAR metal plate and tube cutting machine
Machine power	6KW
80KVA voltage stabilizer	Included
Maximum processing range	2000×4000mm
X-axis travel	2000mm
Y-axis travel	4000mm
Z-axis travel	290mm
W-axis rotation angle	n*360
W axis maximum speed	80RPM
X / Y / U axis positioning accuracy	±0.03mm
X / Y / U axis repeat positioning accuracy	±0.02mm
Transmission type	Dual drive rack
Working platform exchange time	15-17s
Maximum pipe length	6m
Tube diameter range	Φ 20-240mm □20-240mm
Chuck	Pneumatic
Load-bearing	Plate part: 1200kg Pipe part: 300kg
Lubrication type	Automatic oiling
Dimension	11500*4600*2300mm
Machine weight	10000kg

**LF4020GAR Main Specification**

No.	Name	Quantity	Brand
1	Laser source	1 set	RAYCUS
2	Laser head	1 set	BOCI auto focus
3	Machine body	1 set	GWEIKE
4	Gear and Rack	1 set	Taiwan YYC
5	Reducer	1 set	France MOTOREDUCER
6	Motor on X, Y, Z axis	1 set	INOVANCE
7	Industrial computer	1 set	HP
8	Exhaust Smoke System	1 set	China
9	Front and back pneumatic chuck	1 set	China
10	Control system	1 set	FSCUT
11	Water chiller	1 set	HANLI
12	Control cabinet	1 unit	GWEIKE
13	3rd generation aviation aluminum Beam	1 unit	GWEIKE
14	Auto higher	1 unit	CYPCUT
15	Auto lubrication	1 set	China
16	Closed protective cover	1 set	GWEIKE
17	Exchange table	1 set	GWEIKE
18	Bearing	1 set	NSK
19	Electrical components	1 set	SCHNEIDER
20	Guide rail	1 set	HIWIN

▶ MAIN CONFIGURATION



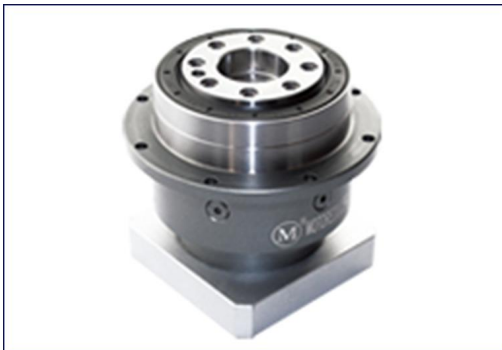
▼ RAYCUS Laser Source

- High Electro-optic Conversion Efficiency
- High reliability, long service life
- Maintenance-free Operation



▼ BLT

- Modular design
- Low maintenance cost
- Faster response to collimation and focusing



▼ France MOTOREDUCER

- Stable operation
- Low noise
- Large output torque
- High speed ratio



▼ Taiwan - YYC

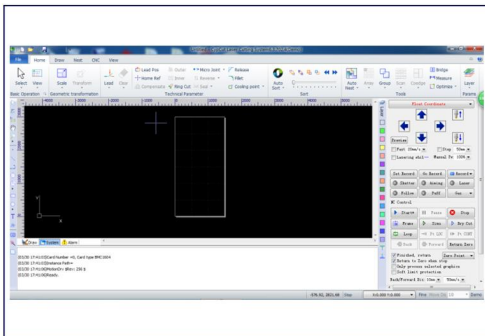
- High precision
- Accurate instantaneous transmission ratio
- High transmission efficiency;
- Long life

▶▶ MAIN CONFIGURATION



▼ Servo Motor-Inovance

- High accuracy
- High-speed performance
- High adaptability & stability
- Timeliness, short dynamic response time of motor



▼ CYPCUT control system

- Easy to use
- Various file editing functions
- Support remote control
- Real-time alarm and protection



▼ Han Li Water Chiller

- Machine protection
- large cooling capacity
- Stable performance



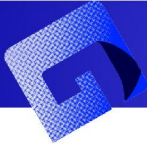
▶ CUTTING PARAMETERS

Metal plate cutting part

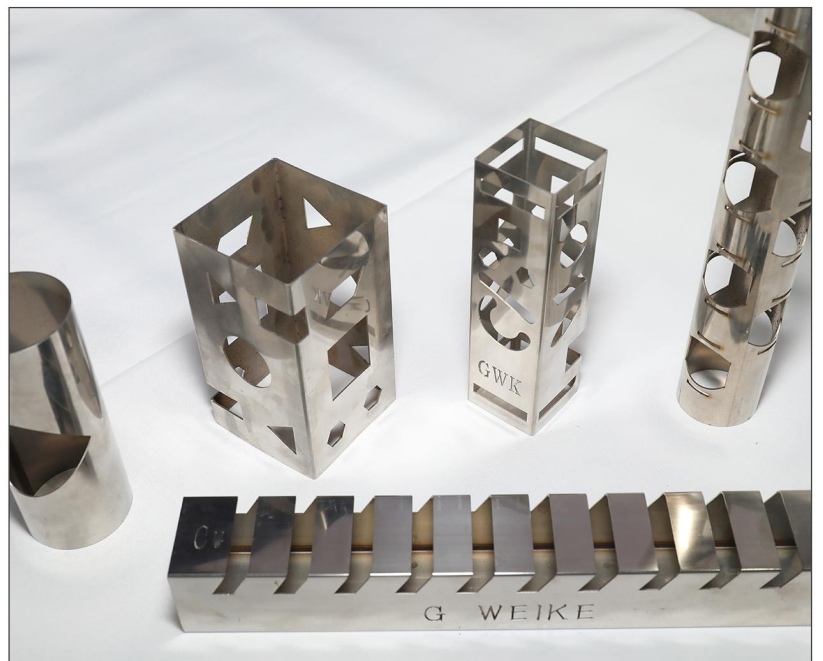
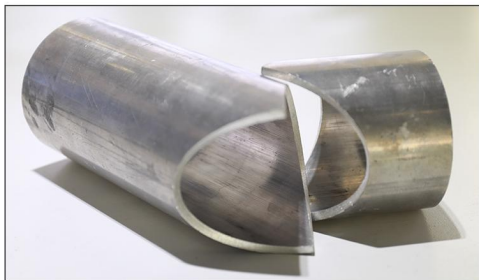
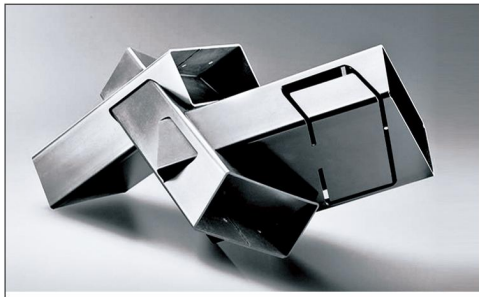
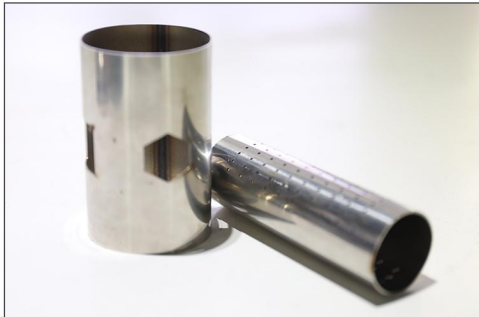
Cutting Parameters												
Material	Thickness (mm)	1000W	1500W	2000W	3000W	4000W	6000W	8000W	12000W	15000W	20000W	30000W
		speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)
Carbon steel cut by O2	2	3.5-5.0	3.8-5.0	5.0-6.0	5.5-7.0	5.5-7.7	6.0-8.25	6.8-7.2	7.2-7.8	7.5-8.2	7.8-8.5	8.0-10.0
	3	2.5-3.5	2.8-3.8	3.5-4.3	3.6-5.0	3.7-5.5	4.0-5.5	4.8-5.5	5.2-5.8	5.5-6.0	5.8-6.3	6.0-7.0
	4	2.0-3.3	2.3-3.5	2.8-4.0	3.0-4.5	3.5-4.6	3.5-5.0	3.8-4.3	4.2-4.6	4.5-5.2	4.8-5.5	5.0-6.5
	5	1.4-2.0	1.6-2.5	2.5-3.0	2.5-3.3	2.5-4.0	3.0-4.2	3.3-4.3	3.8-4.7	4.0-5.0	4.3-4.8	4.5-5.0
	6	1.2-1.6	1.4-1.8	2.2-2.5	2.3-2.8	2.5-3.5	2.6-3.5	3.0-3.4	3.5-4.0	3.8-4.3	4.0-4.5	4.2-4.8
	8	0.8-1.1	0.9-1.3	1.3-1.8	1.8-2.2	2.0-2.8	2.0-2.8	2.3-3.0	2.6-3.3	2.8-3.5	3.0-3.6	3.5-4.0
	10	0.6-0.9	0.8-1.2	1.2-1.5	1.2-1.6	1.2-2.2	1.8-2.3	2.0-2.5	2.5-3.0	2.6-3.0	2.8-3.2	3.0-3.5
	12	0.4-0.7	0.7-1.0	0.8-1.0	1.0-1.3	1.0-1.7	1.6-2.1	1.7-2.2	2.0-2.3	2.5-3.0	2.7-3.2	2.8-3.4
	16		0.5-0.7	0.6-0.8	0.6-0.9	0.7-1.0	0.7-1.0	1.2-1.4	1.4-1.6	1.7-2.0	1.9-2.3	2.0-2.5
	20				0.5-0.8	0.6-0.9	0.5-0.9	1.0-1.1	1.5 (快速2)	1.3-1.6	1.5-1.8	1.6-2.0
	22					0.5-0.8	0.5-0.7	0.9-1.0	0.9-1.2	1.1-1.3	1.3-1.6	1.5-1.8
	25						0.4-0.6	0.6-0.7	0.6-0.9	0.9-1.2	1.0-1.4	1.3-1.5
	30							0.3-0.6	0.5-0.8	0.6-0.8	0.8-1.2	1.2-1.4
	40								0.25-0.33	0.4-0.7	0.7-0.9	0.9-1.1
	50								0.18-0.2	0.2-0.25	0.3-0.5	0.6-0.8
60									0.18-0.2	0.2-0.25	0.22-0.28	
70										0.18-0.2	0.19-0.22	
80											0.12-0.15	
Stainless Steel cut by N2	1	16.5-22.0	20.0-26.0	27.5-33.0	31.0-38.5	33.0-45.0	50.0-65.0	63.0-66.0	70.0-80.0	75.0-90.0	80.0-100.0	82.0-100.0
	2	4.5-6.1	7.0-10.0	9.0-11.0	12.0-16.5	15.0-20.0	30.0-40.0	40.0-44.0	44.0-48.0	46.0-50.0	50.0-60.0	63.0-75.0
	3	2.0-3.1	4.5-5.5	5.0-6.5	7.0-10.0	7.5-12.0	18.0-25.0	25.0-28.0	28.0-35.0	30.0-38.0	35.0-45.0	52.0-58.0
	4	1.0-1.6	2.0-2.5	2.2-2.8	5.0-7.2	5.5-9.0	10.0-15.5	15.0-18.0	20.0-26.0	22.0-28.0	30.0-32.0	35.0-43.0
	5	0.4-0.7	1.5-2.0	1.5-2.0	1.8-2.4	4.0-5.5	8.0-13.5	12.0-14.0	15.0-20.0	16.0-22.0	24.0-28.0	25.0-30.0
	6		0.6-0.9	0.7-1.3	1.0-1.6	2.6-4.5	6.0-9.0	9.0-9.5	11.0-13.0	12.0-15.0	20.0-25.0	22.0-25.0
	8			0.3-0.6	1.2-2.0	1.6-2.8	4.0-5.5	5.0-5.3	7.0-7.5	7.5-8.5	14.0-17.0	18.0-22.0
	10				0.7-1.0	0.7-1.6	1.8-2.8	3.8-4.0	5.0-5.5	5.5-6.5	10.0-13.0	14.0-18.0
	12					0.5-0.9	1.2-1.6	2.5-2.7	3.0-3.5	3.3-4.0	9.0-10.0	12.0-14.0
	14						0.8-1.2	1.8-1.9	2.3-2.8	2.5-3.0	7.0-8.5	8.0-10.0
	16						0.6-0.9	1.3-1.5	2.1-2.5	2.3-2.8	5.0-6.0	7.0-8.0
	20							0.7-0.8	1.4-1.7	1.5-1.9	2.5-3.0	4.0-5.0
	25							0.5-0.6	0.7-1.0	0.9-1.2	1.4-1.8	2.0-2.5
	30								0.5-0.7	0.6-0.8	0.9-1.2	1.2-2.0
	35									0.5	0.55-0.8	0.7-1.0
40											0.6-0.8	

Pipe cutting part:

Under the same power and the same plate, the cutting thickness of the pipe is generally 60% of the cutting thickness of the plate.

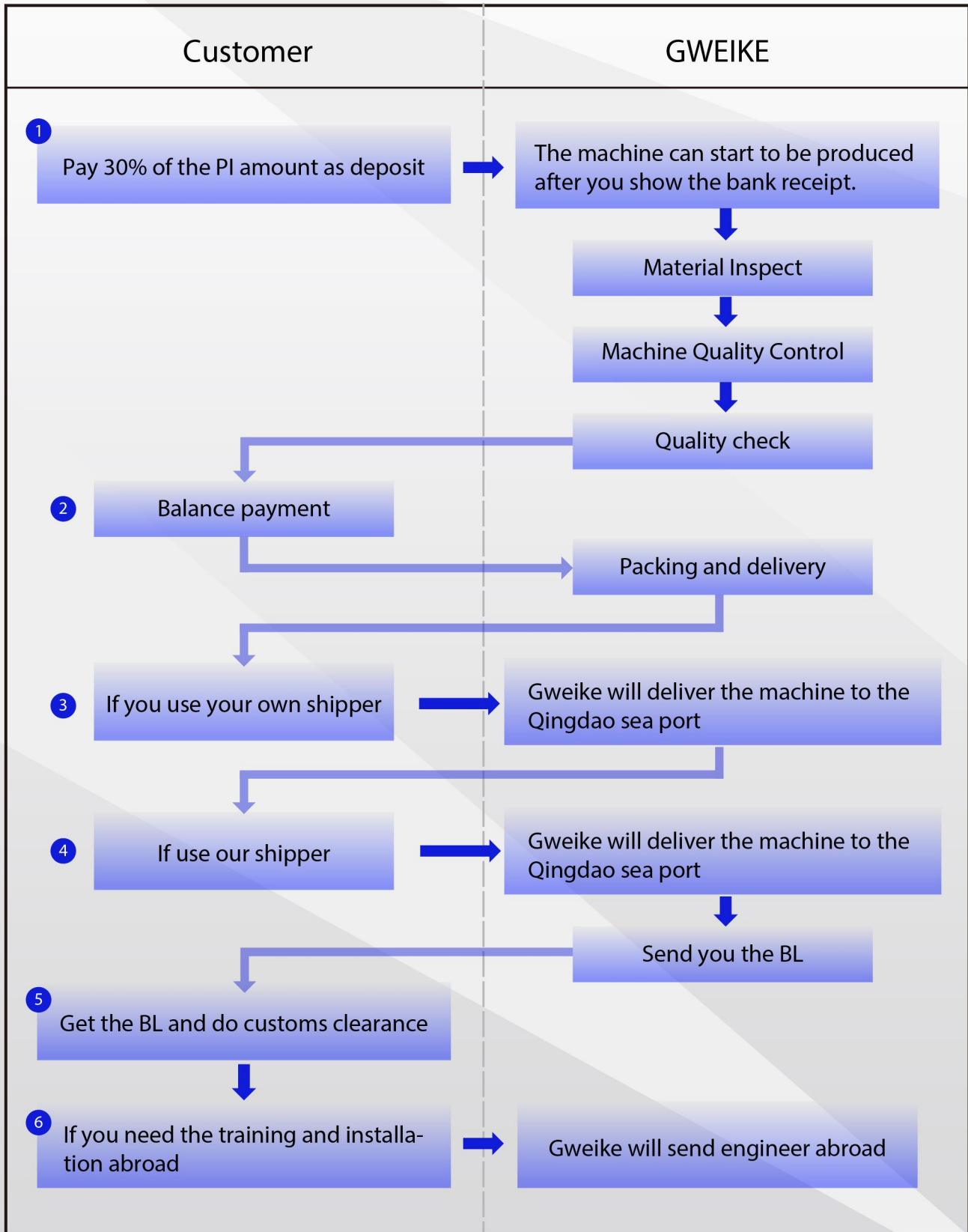


▶ SAMPLES





▶ SERVICE SYSTEM





Gweike Tech Co., Ltd. is established in July 2004, a company with 18 years of production experience in the development, production and sales of fiber laser cutting machines.



90000+

The production base covers an area of 90,000 square meters



1000+

Office area of more than 1,000 square meters



800+

More than 800 employees



100+

R&D and production team of more than 100 people



21+

21 Services Office All Over The World



▶ EXPO STAFF

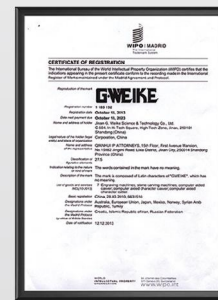
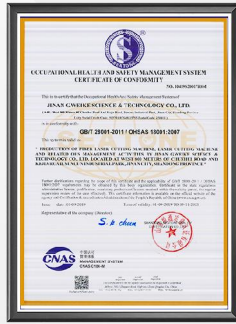


**SERVICE FOR 150
COUNTRIES**





▶ QUALIFICATION/ HONOR





▶ **QUALITY CONTROL PROCESS**

① **Incoming Quality Inspection**

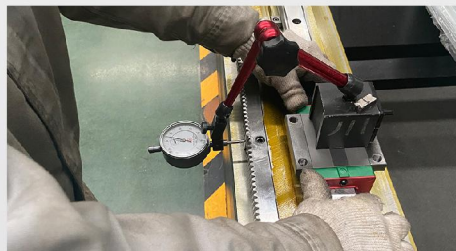
Laser Source Test



Laser Head Test



Rack Detection



Motor / Reducer Testing



**Machine Parts Qualification
And trades Certificate**





② Production process quality control

①

**Machine
Bed Welding**



②

**Machine Bed
Heat Treatment**



③

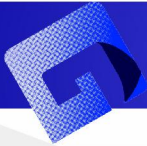
Milling Machine



④

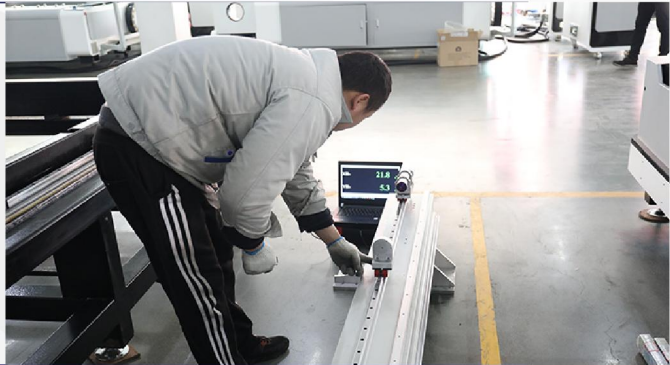
**Accurate
Installation**





⑤

Collimator Tests



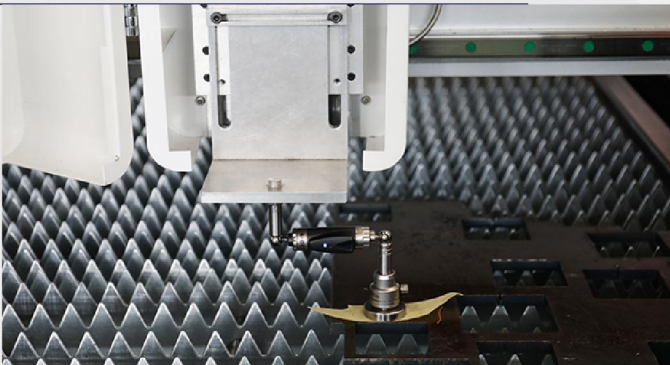
⑥

Marble Square Ruler



⑦

Double Ball Bar Test



⑧

Laser Interferometer Test





3 Before Package

①

Machine Running Test



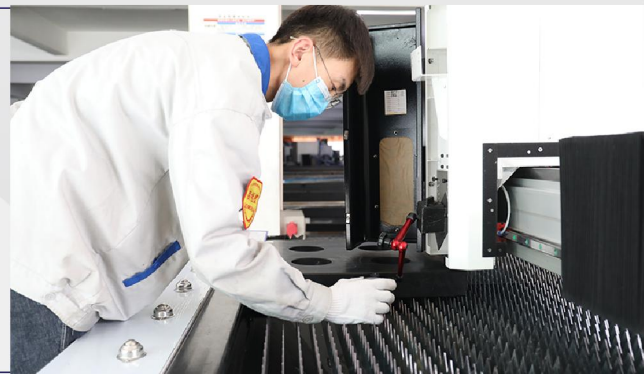
②

Machine Cutting Test



③

Outlook Quality Test



④

Quality Check Report

光纤切割机质检报告

GWEIKE

机床编号: 2020 机床型号: 13255 伺服电机: 伺服电机: 功率: _____
 丝杠: _____ 丝杠V: _____ 光纤激光器型号: _____ 型号: _____
 切割机型号: _____ 割制号编号: _____ 版本型号: _____

以下检测内容质检员必须执行:

序号	检测内容	检测方法/标准	检测工具	责任人	确认日期	质检确认
1	X轴导轨、丝杠、滚珠直线度、平行度	X轴导轨直线度 ± 0.02 MM, 滚珠与导轨平行度 ± 0.03 MM, 两导轨平行度 ± 0.02 MM, 丝杠与导轨平行度 ± 0.02 MM 标准值全部 ≤ 0.02 MM	大理石平台、百分表		2/16	
2	丝杠配合	X轴丝杠、丝杠、滚珠安装需打紧且上紧	目测			
3	X轴导轨、丝杠、滚珠直线度、平行度	导轨直线度 ± 0.02 MM, 滚珠与导轨平行度 ± 0.03 MM, 两导轨平行度 ± 0.02 MM, 丝杠与导轨平行度 ± 0.02 MM 标准值全部 ≤ 0.02 MM	大理石平台、百分表		2/17	
4	丝杠配合	X轴丝杠、滚珠安装需打紧且上紧	目测		2/17	
5	Z轴垂直度检测	将百分表垂直于Z轴, 一侧与X轴平行, 另一侧与Y轴平行, 垂直度 ± 0.02 MM, 垂直度 ≤ 0.02 MM	百分表		2/17	
6	X轴、丝杠、滚珠	螺母安装需打紧	内六角扳手		2/17	