

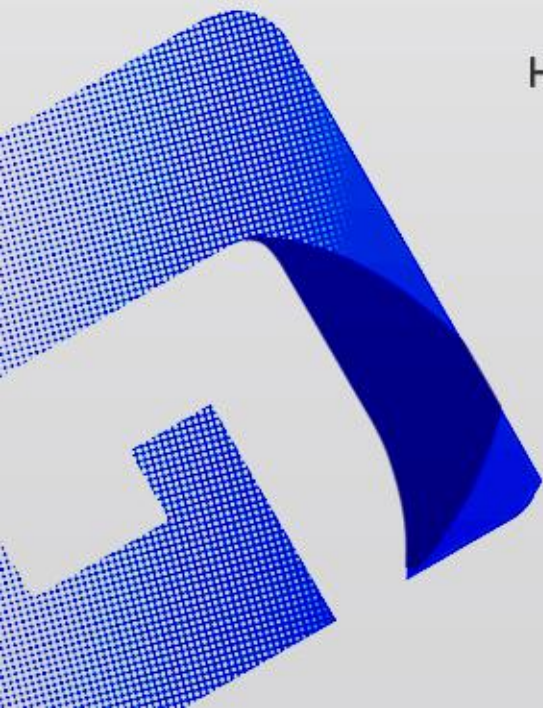


TECHNICAL PROPOSAL

LF1390

1000W-2000W

HIGH PRECISION COVER LASER CUTTING MACHINE



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Gold Quality,

Made With Wisdom By GWeike.

Customer-Centric, Quality Supreme

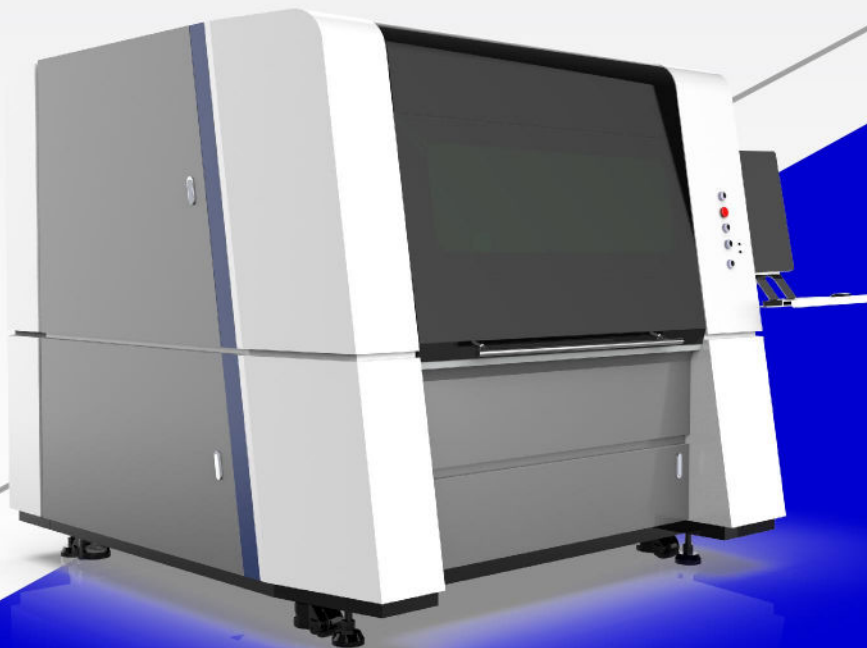


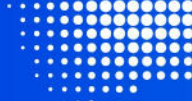
▶ **PRODUCT OVERVIEW**

- G.WEIKE fiber laser cutting machine is equipped with Japanese servomotor servo motor, imported TBI dual driver grinding ball screw for Y axis, imported TBI grinding ball screw for X axis and Hiwin guide rail, the positioning accuracy of the machine tool can be 0.02mm and the cutting acceleration is 0.5G. The working life is more than 10 years.



▼ **ADVANTAGE**

- Aviation Aluminum Gantry
- High precision
- Dual Rail and Dual Driver Design

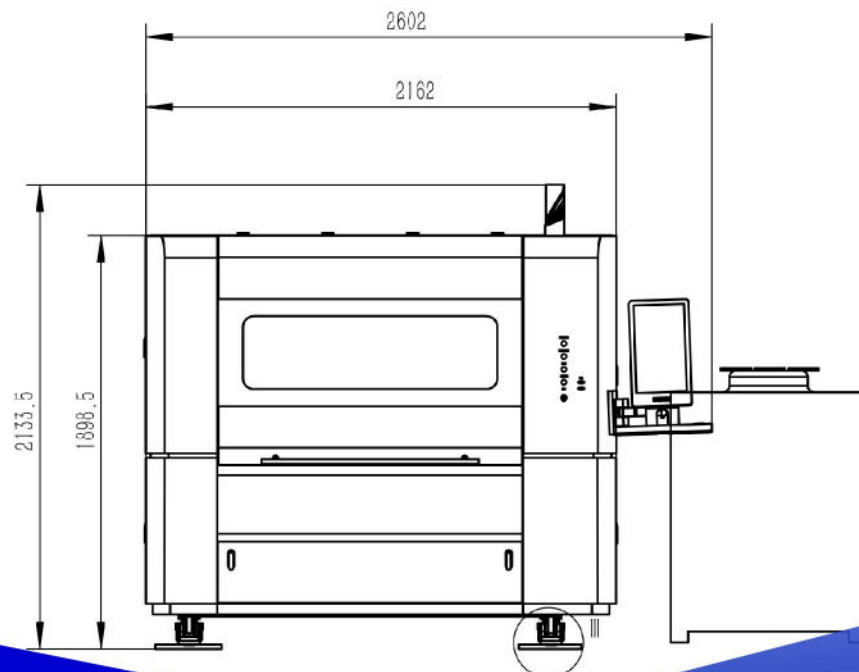
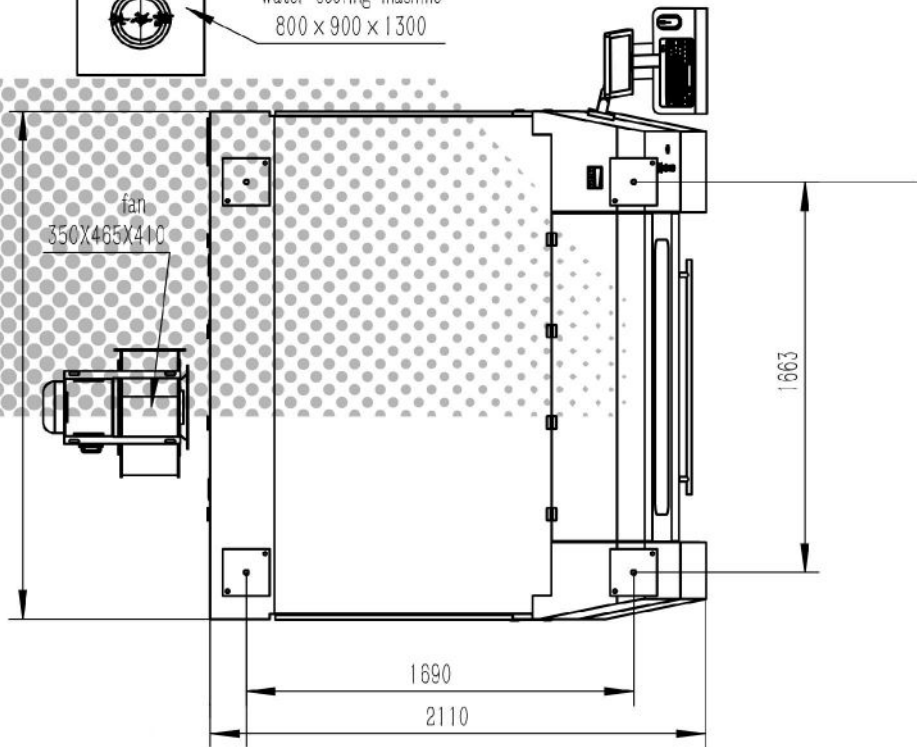


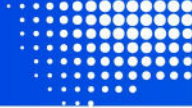


▶ PRODUCT DESCRIPTION

-  voltage stabilizer
390x600x870
-  Water cooling machine
800 x 900 x 1300

— LF1390 —





▶ TECHNICAL PARAMETERS

Model	LF1390
Maximum processing range	900×1300mm
X-axis travel	920mm
Y-axis travel	1320mm
Z-axis travel	80mm
X / Y axis positioning accuracy	±0.03mm
X / Y axis repeat positioning accuracy	±0.02mm
X / Y axis maximum moving speed	40m/min
X / Y maximum acceleration	0.8G
Working exchange platform	No
Working platform load	400kg
Enclosed laser protection	Yes
Lubrication type	automatic oiling
Power available	1000-3000w
Machine dimension(Length*width*height)	2115×2600×1880mm³
Total Weight	2150kg

**LF1390 Main Specification**

No.	Name	Quantity	Brand
1	Laser source	1 set	Raycus/MAX
2	Laser head	1 set	Raytools
3	Machine body	1 set	Gweike
4	Ball screw	1 set	TBI
5	Exhaust Smoke System	1 set	China
6	Guide rail	1 set	Taiwan HIWIN/ Lapping
7	Electronic Components	1 set	France Schneider/CHNT
8	Pneumatic Components	1 set	Japan SMC/CKD
9	Control system	1 set	Cypcut 2000E Bus
10	Water chiller	1 set	S&A Water Chiller
11	Control cabinet	1 unit	Gweike
12	4th generation aviation aluminum Beam	1 unit	Gweike
13	Auto lubrication	1 set	China
14	Industrial computer	1 set	HP



MAIN CONFIGURATION



▼ RAYCUS Laser Source

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



▼ BM110

- Auto focus
- Optimized optical configuration
- Protect modules for calibration and focus lens
- Drawer-type of lens mount, quick and easy use



▼ France MOTOREDUCER

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



▼ TBI Grinding Ball Screw

- High efficiency
- Low heat
- High accuracy
- High rigidity

▶ MAIN CONFIGURATION



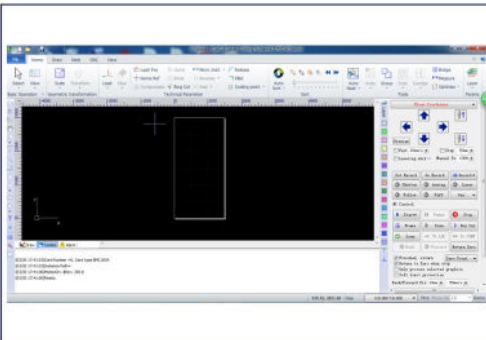
▼ Square Rail-Taiwan HIWIN

- Low noise
- Wear-resistant
- Smoothly, enable fast speed



▼ Servo Motor-Japan YASKAWA

- 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



▼ S&A Water Chiller

- Dual cooling function
- Real-time alarm
- Machine protection



▶ CUTTING PARAMETERS

IPG YLR 1000W			
Material	Thickness	Assisted Gas	Max Speed
Carbon steel	0.8	Nitrogen	24.0-30.0
	1.2		12.0-15.0
	0.5	Oxygen	9.0-10.5
	1.2		7.0-8.0
	2.0		4.5-5.5
	3.0		2.5-3.5
	4.0		2.0-3.0
	5.0		1.4-1.8
	6.0		1.2-1.5
	8.0		0.9-1.2
	10.0		0.6-0.8
	12.0		0.4-0.6
	Stainless steel	0.5	Nitrogen
0.8		25.0-30.0	
1.2		12.0-15.0	
2.0		4.5-5.5	
3.0		2.0-2.8	
4.0		1.0-1.5	
5.0		0.4-0.6	
Brass	6.0		0.2-0.4
	1.0		14.0-18.0
	1.5		5.0-7.0
	2.0		3.0-4.0
Copper	3.0		1.0-1.4
	1.0	Oxygen	7.0-8.0
	2.0		1.2-1.5
Aluminum	1.0	Nitrogen	10.0-12.0
	2.0		2.0-4.0
	3.0		0.6-1.2

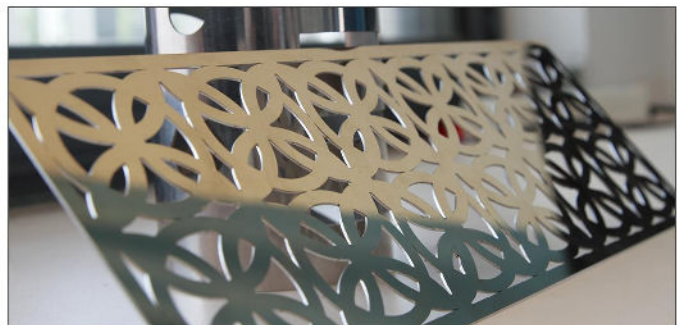
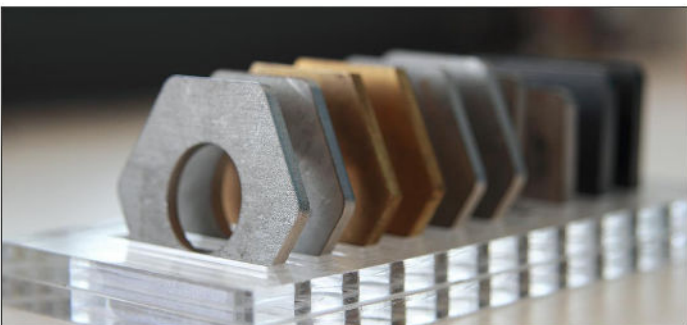


▶ CUTTING PARAMETERS

IPG YLR 1000W			
Material	Thickness	Assisted Gas	Max Speed
Carbon steel	1	Nitrogen	8.0-15.0
	2.0		4.0-6.0
	3.0		2.5-3.5
	4.0	Oxygen	1.6-3.0
	6.0		1.2-1.5
	8.0		1.0-1.2
	10.0		0.5-0.7
Stainless steel	1.0	Nitrogen	8.0-15.0
	2.0		4.0-5.5
	3.0		2.0-2.5
	4		0.8-1.3



▶ SAMPLES





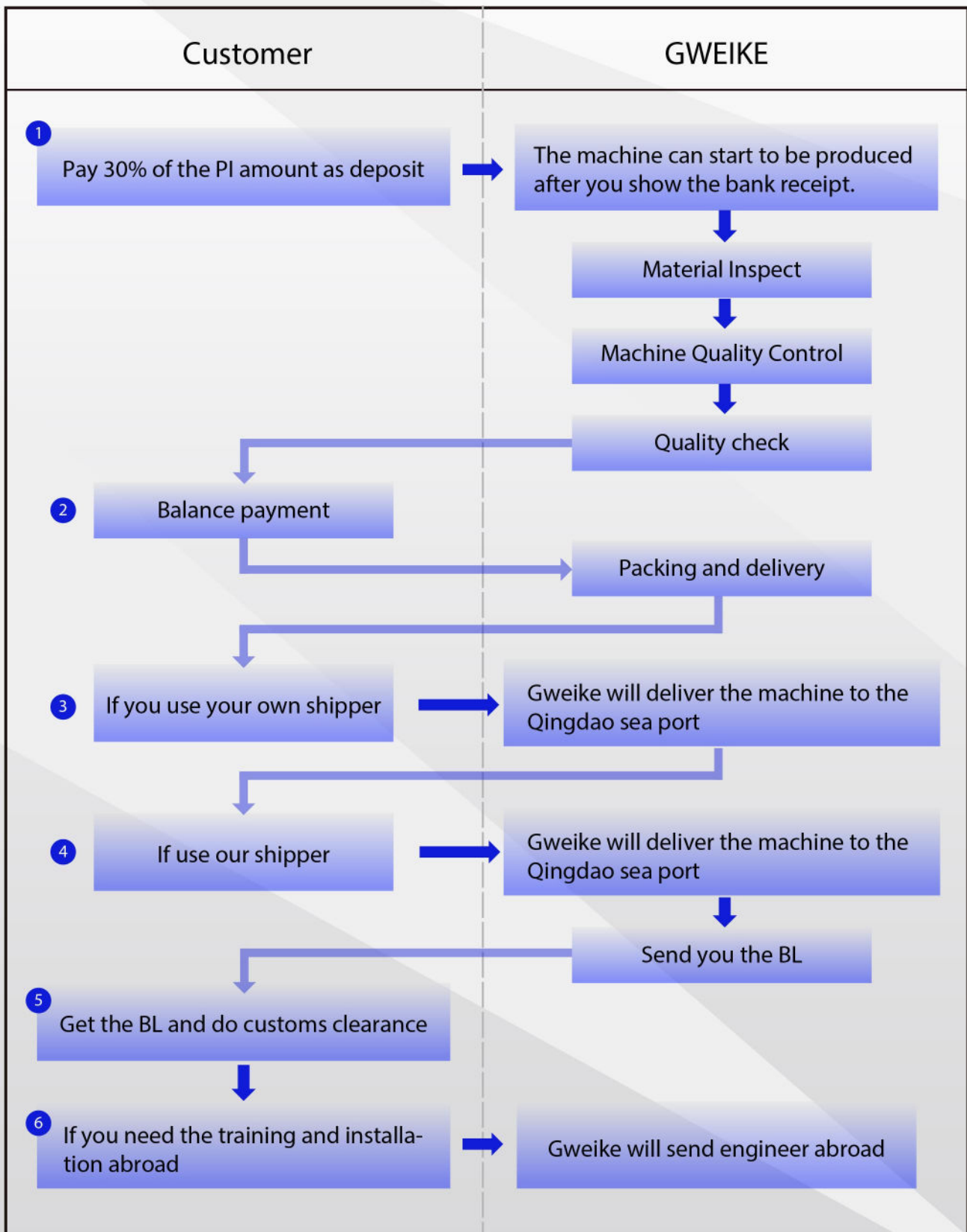
▶▶ COST ANALYSIS

1000W FIBER LASER USING COST

Assisted gas Consumption		Choose I :using aircompressor Group asair supply to cutting Stainless steel	Choose II :using O2Cutting Stainless steel	ChooseIII:using N2Cutting Stainless steel
Power Consumption	Laser module	3kw	3kw	3kw
	Water Chiller Group	2.9kw	2.9kw	2.9kw
	Host Machine	6kw	6kw	6kw
	Dust Exhausting Equipment	3kw	3kw	3kw
Quick-wear Part		2.5 RMB/h	2.5 RMB/h	2.5 RMB/h
Gas Consumption		15kw	(About) 25 RMB/h	(About) 100RMB/h
Total Power		29.9 kw	14.9kw	14.9kw
Average Power Consumption (Take 60%Cutting Efficiency)		$29.9 \times 60\% = 17.94\text{kw}$	$14.9 \times 60\% = 8.94\text{ kw}$	$14.9 \times 60\% = 8.94\text{kw}$
All Cost (1RMB/kwh)		$17.94 + 2.5 = 20.44\text{ RMB/h}$	$8.94 + 25 + 2.5 = 36.44\text{ RMB/h}$	$8.94 + 100 + 2.5 = 111.44\text{ RMB/h}$



▶ 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

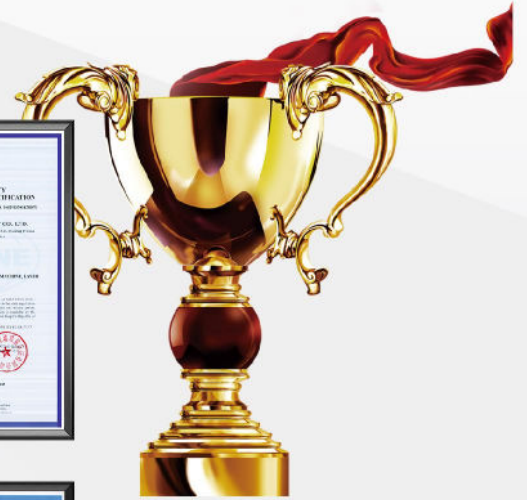


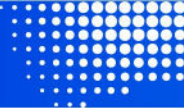
SERVICE FOR 150 COUNTRIES





▶ 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

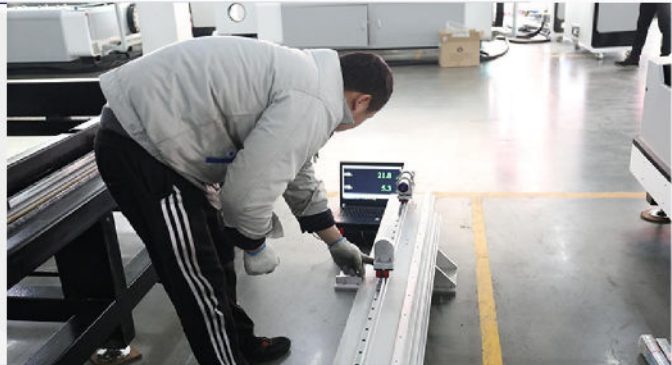
**Accurate
Installation**





⑤

Collimator Tests



⑥

Marble Square Ruler



⑦

Double Ball Bar Test



⑧

Laser Interferometer Test





3 Before Package

①

Machine Running Test



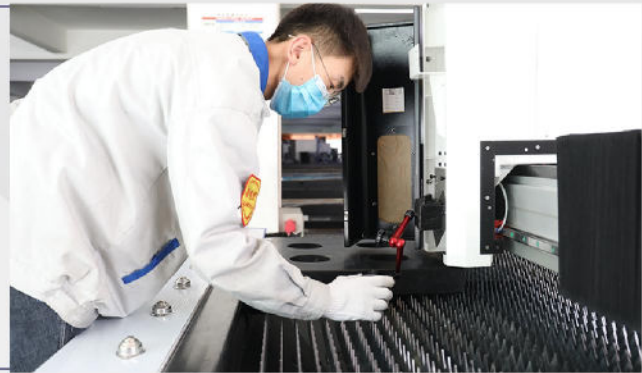
②

Machine Cutting Test



③

Outlook Quality Test



④

Quality Check Report

GWEIKE

机器编号: 2020 机器型号: G1205 伺服电机: 伺服电机: 品牌: _____

机头: _____ 机头: _____ 光纤激光器编号: _____ 型号: _____

控制头型号: _____ 控制头编号: _____ 版本号: _____

以下数据内容请操作人员仔细核对:

序号	检测内容	检测方法及标准	检测工具	责任人	确认日期	检测确认
1	X轴导轨、丝杆、滚珠丝杆精度、平行度	X轴导轨总精度 ± 0.02 MM, 滚珠与导轨平行度 0.02 MM, 滚珠与导轨平行度 0.02 MM, 滚珠与导轨平行度 0.02 MM	大理石平台、百分表		2/10	
2	丝杆精度	丝杆精度 ± 0.02 MM, 滚珠与导轨平行度 0.02 MM	百分表			
3	Z轴导轨、丝杆、滚珠丝杆精度、平行度	Z轴导轨总精度 ± 0.02 MM, 滚珠与导轨平行度 0.02 MM, 滚珠与导轨平行度 0.02 MM	大理石平台、百分表		2/17	
4	丝杆精度	丝杆精度 ± 0.02 MM, 滚珠与导轨平行度 0.02 MM	百分表		2/17	
5	Y轴导轨精度检测	Y轴导轨总精度 ± 0.02 MM, 滚珠与导轨平行度 0.02 MM, 滚珠与导轨平行度 0.02 MM	大理石平台、百分表		2/17	
6	丝杆、丝杆、滚珠丝杆精度	丝杆精度 ± 0.02 MM, 滚珠与导轨平行度 0.02 MM	大理石平台、百分表		2/17	



▶ STRICT PACKAGE PROCESS



01

Machine Cleaning



02

Protective Oil Processing



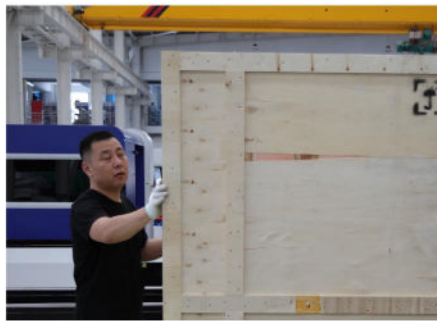
03

Protective Film Wrapping



06

Wooden Boxseal



05

Box Nailing



04

Wooden Box Delivery



07

Container Loading



08

Container Sealing



09

Transportation