### **Product Features**





Manual Laser Welding Machine

# 1000W 1500W 2000W

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Simple operation, Beautiful welding seam Fast welding speed, No consumables

#### **Products Feature**



# **Welding Firmly**

Applicable to a variety of metals or alloys

No depression at the junction of the convex part of the molten pool and the substrate



#### **Products Feature**





# **Welding Seam Beauty**

Small welding heat affected area

Won't cause the workpiece to be deformed, blackened, and traces on the back

### Products Feature



# **Smooth wire feeding**

Automatic wire feeding speed can be adjusted

Can be widely used in aluminum alloy, stainless steel, low carbon steel and other materials





model JW-BX 1000/1500/2000	Output Power 1000W/1500W/2000W	Laser Wavelength 1064NM
Water Chiller BingYue/Portable /Regular	Laser Raycus /Max/Reci/国志	Welding Head  Qiling/Chaoqiang Weiye
Working Method Continuous modulation	Laser frequency 0-100HZ	Maximum single pulse energy
Focus spot diameter 0.2-3.0MM	laser cooling Water Cooling	Protective gas Argon Nitrogen
Continuous working time ≥ 24h*7	Machine powered 220V/380V	Whole Machine Weight  90kg

# Wire feeder technical parameters



Voltage AC220V 50hz/60hz Rotating speed

1200 rpm

Wire Spool Size

305 mm

Wire Size

Wire feeding speed

Speed regulation accuracy

0.8mm,1.0mm,1.2mm 0-

0-600cm/min

±1%

Jog wire feed speed

Jog wire back

Weight

200 cm/min

100cm/min

17.5 KG

# Welding process parameters

Penetration parameters			
Material	Output Power W	Max Penetration (mm)	
MS/ SS	1000	3	
MS/SS	1500	4	
MS/SS	2000	5	
Aluminum alloy	1000	2	
Aluminum alloy	1500	3	
Aluminum alloy	2000	4	

Hai	ndheld welding	head without wire	feed parameters (cont	inuous mode
N 4 a tra vi a l	Thickness	Laser Power (W) Weld	Swing frequency(HZ)	spot size(mm)
Material (mm)	Firmly/ penetration	Weld Firmly /Penetration	Weld Firmly/Penetrati	
0.5		270/300	150/150	0.7
1 1.5	1	450/550	140/140	1.5
	1.5	550/570	100/100	2
MC /	2	750/900	100/100	2
MS / 2.5 3 3.5 4 5	2.5	900/1050	100/100	2
	3	1050/1200	100/100	2
	3.5	1200/1350	100/100	2
	4	1350/1500	100/100	2
	5	1700/2000	100/100	2
1 1.5 2 1.5 2 1.5 3 4	670/750	100/100	2	
	1.5	750/900	100/100	2
	2	900/1100	100/100	2
	2.5	1100/1250	100/100	2
	3	1350/1500	100/100	2
	4	1850/2000	100/100	2

Remarks: The weld width that can be welded by hand-held head without wire feeding is 10% of the material thickness

#### Laser High-end configuration Optional



可选:【创鑫激光器】



可选: 【锐科激光器】

#### Max Laser Feature

- Domestic first-line brand, stable performance
- Maintenance convenience, reduces downtime
- Multi-scenario, wide application
- Can be customized to meet a variety of needs

### Raycus Laser Feature

- Domestic first-line brand, stable performance
- Modular design for easier maintenance
- Independent control reduces downtime
- Intelligent monitoring, easy to operate

The single-mode continuous fiber laser adopts a modular design, the system is highly integrated, and the reliability is high. The laser power is continuously adjustable and the laser stability is high. It is an ideal laser source for applications such as laser fine cutting and precision welding.

# Laser standard optional =

# ▶ 国志 laser feature

- Domestic well-known brand, high cost performance
- Easy maintenance and less downtime
- High light conversion efficiency
- High frequency of laser welding

#### **Reci Laser Features**

- Domestic well-known brand, high cost performance
- Modular design for easier maintenance
- Set high power, light size
- Intelligent monitoring, easy to operate



可选: 【国志激光器】

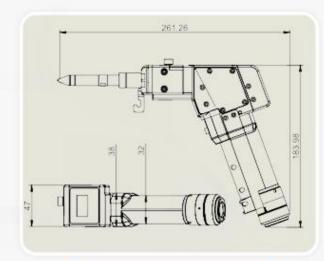


可选: 【热刺激光器】

A new generation of single-module laser, this product integrates high power, light size, user-friendly control, high-quality beam quality, and high light conversion efficiency. It can meet the requirements of precision processing, suitable for remote processing, high frequency of laser cutting, high cutting surface finish, can be high speeding

#### **Welding Head High End Optional**





**Optional: Qiling Welding Head** 

【麒麟焊接头规格尺寸】

Connect Type	Focusing Length	Laser Power	
QBH	120/150	2000W	
adjustable range	Collimating Length	Weight	
0 5mm	50/75	1KG	

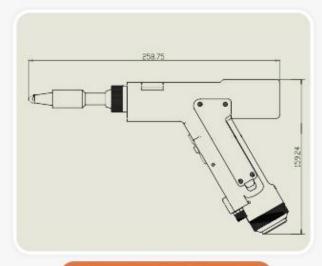
Artificial intelligence, remote control. Data storage, can save the process. Fault monitoring for quick troubleshooting. Intelligent decryption, flexible use. Serial communication, adjustable wire feeding. Strong anti-interference, safe and stable. Ergonomic design, easy to operate. Control box integrated design, easy to install

Qiling welding head is a powerful hand-held welding head, which can realize point, coil, triangle, 8 characters and other light output modes. Lightweight and flexible, the grip design is ergonomic. The protective lens is easy to replace. High quality optical lens, can carry 2000W power

### Welding Head Standard







【超强伟业焊接头尺寸】

Interface Type	Focusing Length	Laser Power
QBH	120/150	1500W
adjustable range	Collimating Length	Weight
0 6mm	50	1.5KG

This product covers hand-held welding gun and self-developed control system. It uses ST high-speed processor and sets up multiple safety alarms, active safety power-off, and segment light settings. This product can be adapted to various brands of fiber lasers; the optical and water-cooled design is optimized so that the laser head can work stably for a long time at 2000W

Basic features: self-developed control system, setting multiple security alarms, smaller size, flexible operation, and easy to use. More stable: all parameters are visible, real-time monitoring of the state of the whole machine, avoid problems in advance, more convenient troubleshooting and problem solving, and ensure the stable operation of the welding head

#### **Chiller Manual Instruction**

#### Corresponding relationship between different volume ratios of ethylene glycol and freezing point

Volume fraction ratio %	freezing point °C	Volume fraction ratio %	freezing point °C	Volume fraction ratio %	freezing point °C
1.8	-0.6	26	-13.0	51.9	-41.0
3. 6	-1.3	28	-15.0	53. 9	-44.0
5. 4	-2.0	29. 9	-17.0	56. 0	-48.0
7. 2	-2. 7	31.9	-18.0	78. 9	-47.0
9. 1	-3, 5°	33. 8	-20.0	81.0	-43.0
10.9	-4. 4	35. 8	-22. 0	83. 1	-40.0
12.8	-5. 3	37.8	-24.0	85. 2	-36. 0
14.6	-6. 3	39. 8	-26.0	87.3	-33.0
16. 5	-7.3	41.8	-28.0	89. 4	-29.0
18. 4	-8. 0	43. 8	-31.0	91. 5	-26.0
20. 3	-9.0	45.8	-33. 0	93. 6	-23.0
22. 2	-11.0	47.8	-36.0	95. 8	-19.0
24. 1	-12.0	49.8	-38. 0	100	-13.0

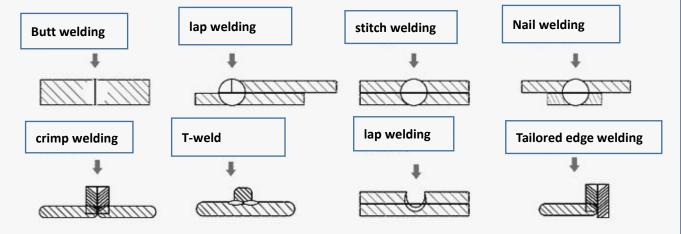
- Check the condenser, check whether the air duct is blocked by foreign objects, and whether the air in and out around the equipment is unobstructed
- Check whether there is foreign matter in the cooling medium, whether it breeds microorganisms, etc. Generally, replace the cooling medium within 15-20 days. The cooling medium must be pure water, distilled water or high-purity water.
- Check whether the water joints are loose and the water pump is leaking
- Regularly clean the filter element in the water circuit of the equipment, generally cleaning the filter every 7-10 days. There are two kinds of filters commonly used by our company, as shown in Figure 13. The Y-type filter is installed at the water suction of the pump or the water outlet of the equipment, and the built-in stainless steel filter is installed in the tank

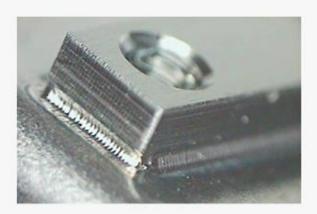
# Welding process display

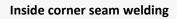


### Welding at various angles

Meet any of your welding needs

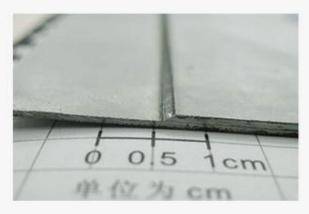








fillet seam welding



stitch welding



**External corner seam welding** 

# DIMENSION REFERENCE

# 模拟参考

# Small size , big purpose

Can put the trunk, can enter the elevator



# **Professional Repair Lasers**

Repair and upgrade various brands of lasers

IPG, Rofin, SPI, Raycus, Max, Reci, Guozhi, JPT etc.....

Laser equipment repair and after-sales service, laser power upgrade and repair and maintenance services. Laser cutting head repair and installation services, cutting machine relocation and operation training related consumables replacement guidance



锐科激光器





IPG激光器



电模块



罗芬激光器



光纤、模块

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