

# MIMY

PLASMA MACHINERY PARTS  
CNC FLAME CUTTING MACHINE PARTS



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## PLASMA CUTTING MACHINE SOURCE

### LGK-120/200/300/400HD Inverter Air Plasma Cutting Machine

#### Main Features

- With plasma torch consumables life monitoring function
- With gas pressure and coolant liquid flow displaying, detecting, warning and controlling function
- The gas pre-flow, post-flow and current up-slope time can be set separately
- With automatic protection of over-heating and lackvoltage
- Error code displaying function
- Intelligent fan is used to reduce the dust
- LGK-120HD with constant pilot arc strike function, which is suitable for grid plate cutting



#### Product Application

- Suit manual and automated cut for carbon steel, alloy steel and nonferrous steel

#### Main Technical Parameters

Item	Unit	Models			
		LGK-120HD	LGK-200HD	LGK-300HD	LGK-400HD
Input Power	V/Hz	3~380±15% 50/60			
Rated Input Capacity	KVA	21.2	46.5	70.4	92.3
Rated Input Current	A	32.5	70.9	107	142
Rated Output Current	A	120	200	300	400
Rated Output Voltage	V	128	160	200	200
Rated Open Circuit Voltage	V	308	360	370	370
Rated Duty Cycle	-	100% (40°C)			
Efficiency	-	92%			93%
Power Factor	-	0.78		0.92	
Output Current Adjust Range	A	30~120	40~200	60~300	60~400
Arc Voltage Output Ratio	-	1:1/1:20/1:50/1:100 (Default 1:1)			
Quality Cut Thickness (Carbon Steel)	mm	20 (500mm/min)	32 (500mm/min)	40 (500mm/min)	48 (420mm/min)
Severance Cut Thickness (Carbon Steel)	mm	25 (280mm/min)	45 (250mm/min)	50 (270mm/min)	60 (250mm/min)
Handheld Severance Cut Thickness (Carbon Steel)	mm	45	65	80	90
Plasma gas	-	Compressed Air			
Air Pressure	MPa	0.5~0.8			
Coolant Working Flow	L/min	-	≥2.7		
Torch Cooling Mode	-	Air Cooling	Air Cooling / Water Cooling		
Arc Strike Mode	-	Non-Contact			
Power Source Cooling Mode	-	Air Cooling			
Insulation Grade	-	F			
Ingress Protection	-	IP21S			
Dimension (L×W×H)	mm	675×320×605	863×385×800	985×445×910	1015×445×910
Net Weight	Kg	46	86	129	148

Above Technical Specification for Reference Only

## PLASMA CONTROLER



**F2100B**



**F2300A**



**F2300B**



**F2500A**

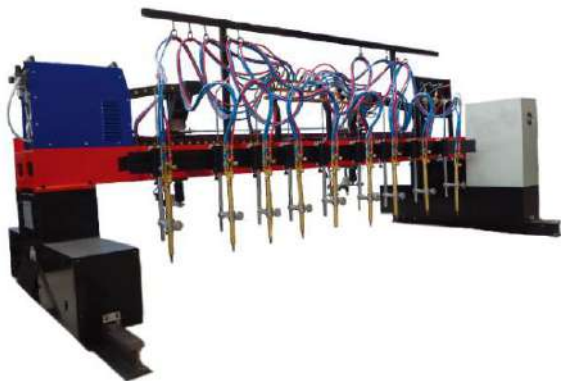


**F2500B**



**F1621**

## The Parts of CNC Flame Cutting Machine



Straight Strip  
Cutting Torch



Digital Control  
Cutting Torch

## CATALOGUE

- 06 ● Double-side Cylinder Manifold
- 07 ● Single-side Cylinder Manifold
- 08 ● Gas Regulator
- 09 ● Gas Distribution Pipeline Valve/Metallic Hose
- 10 ● Balanced Pressure Straight Strip Cutting Torch
- 11 ● Balanced Pressure Digital Control Cutting Torch
- 12 ● Powder Spraying and Marking Device/Flat Double Head Cutting Torch
- 13 ● Ignition Device/ Triple Cutting Torch Holder
- 14 ● Gas Flashback Arrestor
- 15 ● Gas Flashback Arrestor
- 16 ● Gas Separation Panel
- 17 ● Machine-use Cutting Torch Holder
- 18 ● Plasma Cutting Torch Holder
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- 21 ● The Beam and Cutting Torch Holder for Portable CNC Cutting Machine
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- 23 ● G02 Balanced Pressure Acetylene Cutting Nozzle
- 24 ● G03 Balanced Pressure Propane Cutting Nozzle
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- 30 ● Piping System Accessories

## Double-side Cylinder Manifold

Double-side cylinder manifold adopts dual gas supply structure with a main supply cylinder group and a backup cylinder group. When the pressure of the main supply cylinder group becomes too low to supply gas, turn off the valve of the main supply cylinder group, and at the same time turn on the valve of the backup cylinder group to start gas supply. This type of cylinder manifold manually realizes the shift between the main gas supply and the backup one, which can avoid the stop of gas supply.



### Structural Features

- ◆ Open structure design
- ◆ Blind plug at the pipe end for possible extensive
- ◆ The whole system passed pressure test, safe and reliable.
- ◆ Either wall or horizontal installation

### Standard Configuration

- High pressure hoses are metal hoses, or oxygen cylinder manifold uses red copper pipes, the acetylene cylinder manifold uses chrome plated metal stainless steel pipes.
- Flashback arrestor at the outlet of the acetylene and propane cylinder manifold.
- For use of acetylene and propane cylinder manifold, the connecting cylinder rack, T-shaped wrench and adaptor are fitted at the outlet end of the acetylene and propane cylinders.
- Adopting pressure reducer with large flow.

## Single-side Cylinder Manifold

It is specially designed for use of single gas source, and can be widely used as a standby system for the main gas source or other gas sources like tank gas.



### Structural Features

- ◆ Open structure design
- ◆ Blind plug at the pipe end for possible extensive
- ◆ The whole system passed pressure test, safe and reliable.
- ◆ Either wall or horizontal installation

### Standard Configuration

- High pressure hoses are metal hoses, or oxygen cylinder manifold uses red copper pipes, the acetylene cylinder manifold uses chrome plated metal stainless steel pipes.
- Flashback arrestor at the outlet of the acetylene and propane cylinder manifold.
- For use of acetylene and propane cylinder manifold, the connecting cylinder rack, T-shaped wrench and adaptor are fitted at the outlet end of the acetylene and propane cylinders.
- Adopting pressure reducer with large flow.

## Gas Regulator

As a big-flow gas distributing system, gas regulator is particularly designed for the pressure regulating system of the cylinder centralized gas supply device applicable to all kinds of gases. It is a high-precision pressure regulating device under the condition that the input pressure is no more than 15Mpa and the output pressure is between 0.01 and 1.6Mpa. When both the output pressure and the output flow change, it can stabilize the output pressure and work continuously for a long time. It uses brass strainer inside, which can effectively filter gas impurities. The strainer is easy to be replaced.



Double Stage Type



Single Stage Type



Single Stage Type

### Structural Features

- ◆ Double stage pressure reducing structure
- ◆ Use the high quality forging brass for upper cover and its body structure
- ◆ With the sintered bronze filter screen at the inlet gas pipe.
- ◆ For the lining in side of the upper cover, use the high quality stainless steel to make much smoother for pressure reducing.

### Standard Configuration

- ◆ Single stage pressure reducing structure
- ◆ Use the high quality forging brass for upper cover and its body structure
- ◆ With the sintered bronze filter screen at the inlet gas pipe.
- ◆ For the lining in side of the upper cover, use the high quality stainless steel to make much smoother for pressure reducing.

Model No.	Gas Service	Inlet Connection	Outlet Connection	Inlet Pressure (Mpa)	Outlet Pressure(Mpa)	Outlet Flowmeter (m <sup>3</sup> /h)
YQJ-11	Oxygen/ Carbon Dioxide	G3/4	G3/4	15	0.01-1.6	100
EQJ-24	Acetylene/Propane/ Natural Gas	G3/4-LH	G3/4-LH	2.5	0.01-0.15	40



## Gas Distribution Pipeline Valve



### Structural Features

- ◆ Made of high quality forging brass
- ◆ With compact structure and secure seal
- ◆ High strength of pressure resistance

Model No.	Gas Service	Working Pressure	Inlet Connection	Outlet Connection
QF-2C	Oxygen/Air/Nitrogen	15	G5/8"	G1/2"
GJ8-1	Acetylene/Propane/ Natural Gas	2.5	M16x1.5(F)	M22x1.5
QJT200-10	Oxygen/Nitrogen/Air	20	M33x2(F)	M33x2(F)

## High Voltage Metallic Hose

It is used to connect cylinder with gas cylinder manifold.



Model No.	Gas Service	Inlet/ Outlet Connection	Length	Type
LJGX105	Oxygen	G5/8-RH(F)	0.5m/1m	Metallic Hose(Lining: Teflon)
LJGY105	Acetylene	M16x1.5-RH(F)	0.5m/1m	Metallic Hose(Lining: Teflon)
LJGX305	Oxygen	G5/8-RH(F)	1m	Red Copper Hose
LJGY205	Acetylene	M16x1.5-RH(F)	1m	Brass Hose
LJGF205	Propane	M16x1.5/M22x1.5	1m	Brass Hose

## Balanced Pressure Straight Strip Cutting Torch

It is suitable for use in multi-head flame straight strip cutting machines, digital control multi-strip cutting machines and H section steel cutting machines, etc.



### Structural Features

- ◆ It is made of high quality forging brass.
- ◆ Balanced pressure structure design.
- ◆ It adopts silver solder, which can effectively avoid leakage.
- ◆ O.D. of the tube is 30 mm
- ◆ Length of the tube: 85mm, 180mm, 250mm, 370mm, 450mm.
- ◆ The gear rack can be installed at 4 different position with 90 degrees between two positions.
- ◆ It is suitable for balanced pressure cutting nozzle with cone of 30 degrees.

Model No.	Thimble Length(mm)	Cutting Thickness(mm)	Rack Length/ Modulus	Acetylene cutting tips	Propane cutting tips	Inlet connection
GJ	85	300	/	G02#0-#5	G03#0-#5	M12x1.25
GJ	180	300	150/1	G02#0-#5	G03#0-#5	M12x1.25
GJ	250	300	210/1	G02#0-#5	G03#0-#5	M12x1.25
GJ	370	300	210/1	G02#0-#5	G03#0-#5	M12x1.25
GJ	450	300	310/1	G02#0-#5	G03#0-#5	M12x1.25

## Balanced Pressure Digital Control Cutting Torch

It is Suitable for use in digital control flame cutting machines.



### Structural Features

- ◆ It is made of high quality forging brass.
- ◆ Balanced pressure structure design.
- ◆ It adopts silver solder, which can effectively avoid leakage.
- ◆ O.D. of the tube: 30 mm and 32mm.
- ◆ The length of the tube: 180mm,250mm,300mm,370mm,450mm.
- ◆ The tube length of the British system Cutting Torch is 200mm, the O.D of its tube is 32mm.
- ◆ The gear rack can be installed at 4 different position with 90 degrees between two positions.
- ◆ It is suitable for balanced pressure cutting nozzle with cone of 30 degrees.

Model No.	Thimble Length(mm)	Cutting Thickness(mm)	Rack Length/ Modulus	Acetylene cutting tips	Propane cutting tips	Inlet connection
GJ	200	300	/	G02#0-#5	G03#0-#5	G1/4" G3/8",G3/8"
GJ	180	300	90/1	G02#0-#5	G03#0-#5	M16x1.5
GJ	250	300	150/1	G02#0-#5	G03#0-#5	M16x1.5
GJ	300	300	210/1	G02#0-#5	G03#0-#5	M16x1.5
GJ	370	300	210/1	G02#0-#5	G03#0-#5	M16x1.5
GJ	450	300	310/1	G02#0-#5	G03#0-#5	M16x1.5

## Powder Spraying and Marking Device

It is applicable to digital-control cutting machines of different series. It melts zinc powder inside storage tank with flame and sprays it onto the steel plate according to design, then along the zinc powder line cutting machine conducts cutting with digital-control cutting torch. The width of the line is 0.5mm, which is adjustable.



### Usage

- ◆ The powder spraying device has 4 gas inlet channels among which 3 for oxygen, 1 for fuel gas. Two outermost channels, one is for preheat oxygen, the other is for fuel gas; the middle one is for cutting oxygen; by which it is for powder spray.
- ◆ Firstly, screw off knurled nut, put zinc powder into storage tank and screw on the nut.
- ◆ Secondly, ignite powder spray device, adjust cutting oxygen, open the valve of powder spray gas channel, then zinc powder will be automatically sprayed onto the iron plate.

## Flat Double Head Cutting Torch

The flat double head cutting torch produced by our company is a high-effective cutting auxiliary tool. It can increase cutting heads of the cutting machine in a simple and economic way and assembly and disassembly conveniently. When it is used on straight strip cutting machine, it can not only increase the number of cutting heads, but also reach the minimum cutting width (27mm) that can never reach before.



Model No.	Cutting Thickness (mm)	Cutting Angle	Cutting Tip type	Tip Taper Angle	Minimum Cutting Width(mm)	Maximum Cutting Width(mm)
DGJ	150	0-45	G02 /G03	30	27	420

## Ignition Device

The ignition device is equipped with solenoid valve and high-voltage unit, which is installed on the cutting torch to adjust the distance between the cutting nozzle and ignition source. When power is on, with the help of the solenoid valve the high-voltage unit will bring about fire source, which will meet with the fire hole of the cutting nozzle to realize ignition. Using the ignition device it makes it easier to work, and can improve efficiency and reduce the inefficient combustion time of the cutting nozzle.

### Standard Configuration

- Holder: 1
- High-voltage unit: 1
- High-voltage cable: 1 (1.5 M)
- Flashback arrestor: 1
- Gas valve: 1
- Solenoid valve: 1
- Gas inlet assembly: 1
- Copper connecting terminal: 1



## Triple Cutting Torch Holder



- ◆ Use for cutting straight line V/Y/X/K type beveled edges
- ◆ Angle adjustment range:  $\pm 45^\circ$
- ◆ Cutting thickness range: 16-50mm
- ◆ Angle error:  $\pm 5^\circ$
- ◆ The minimum blunt edge for K type beveled edges: 3 mm

## Gas Flashback Arrestor



### Structural Features

- ◆ Mini-hole heat dissipation flame-out device ensures flame out.
- ◆ In tempering process gas check valve instantly cuts off gas supply in automation.
- ◆ It has automatic position change function and can work continuously.
- ◆ It is connected with the gas inlet of cutting torch.

Model No.	Gas Service	Working Pressure (Mpa)	Max Outlet Flowmeter (M <sup>3</sup> /h)	Inlet Connection	Outlet Connection
M12 Oxygen	Oxygen	1	12	M12x1.25	M12x1.25
M12 Fuel Gas	Acetylene/ Propane	0.5	12	M12x1.25-LH	M12x1.25-LH



### Structural Features

- ◆ Mini-hole heat dissipation flame-out device ensures flame out.
- ◆ In tempering process gas check valve instantly cuts off gas supply in automation.
- ◆ It has automatic position change function and can work continuously.
- ◆ It is connected with the gas inlet of cutting torch.

Model No.	Gas Service	Working Pressure (Mpa)	Max Outlet Flowmeter (M <sup>3</sup> /h)	Inlet Connection	Outlet Connection
M16 Oxygen	Oxygen	1	12	M16x1.5	M16x1.5
M16 Fuel Gas	Acetylene/ Propane	0.5	12	M16x1.5-LH	M16x1.5-LH



### Structural Features

- ◆ Mini-hole heat dissipation flame-out device ensures flame out.
- ◆ In tempering process gas check valve instantly cuts off gas supply in automation.
- ◆ It has automatic position change function and can work continuously.
- ◆ It is connected with the gas inlet of cutting torch.

Model No.	Gas Service	Working Pressure (Mpa)	Max Outlet Flowmeter (M <sup>3</sup> /h)	Inlet Connection	Outlet Connection
1/4 Oxygen	Oxygen	1	12	G1/4"-RH(M)	G1/4"-RH(F)
1/4 Fuel Gas	Acetylene/ Propane	0.5	12	G1/4"-LH(M)	G1/4"-LH(F)

## Gas Flashback Arrestor



### Structural Features

- ◆ Mini-hole heat dissipation flame-out device ensures flame out.
- ◆ In tempering process gas check valve instantly cuts off gas supply in automation.
- ◆ It has automatic position change function and can work continuously.
- ◆ It is connected with the gas inlet of cutting torch.

Model No.	Gas Service	Working Pressure (Mpa)	Max.Outlet Flowmeter (M <sup>3</sup> /h)	Inlet Connection	Outlet Connection
3/8 Oxygen	Oxygen	1	12	G3/8"-RH(M)	G3/8"-RH(F)
3/8 Fuel Gas	Acetylene/ Propane	0.5	12	G3/8"-LH(M)	G3/8"-LH(F)



### Structural Features

- ◆ Mini-hole heat dissipation flame-out device ensures flame out.
- ◆ In tempering process gas check valve instantly cuts off gas supply in automation.
- ◆ It has automatic position change function and can work continuously.
- ◆ It is connected with the gas inlet of cutting torch.

Model No.	Gas Service	Working Pressure (Mpa)	Max.Outlet Flowmeter (M <sup>3</sup> /h)	Inlet Connection	Outlet Connection
1/2 Oxygen	Oxygen	1	15	G1/2"-RH(M)	G1/2"-RH(F)
1/2 Fuel Gas	Acetylene/ Propane	0.5	15	G1/2"-LH(M)	G1/2"-LH(F)



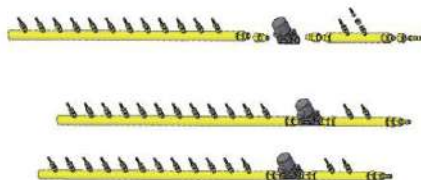
## Gas Separation Panel

It is used in multi-headed flame straight strip cutting machines or digital control cutting machines, and can be used after connecting the separation panel joint with the cutting torch.



### Structural Features

- ◆ It adopts silver solder for the pipe system, which can effectively avoid leakage.
- ◆ It uses replaceable joint at the gas inlet end, which can be replaced according to customers' needs.
- ◆ With standard configuration at the gas outlet end, end-ring can be used to control the number of gas path needed.
- ◆ The number of gas separation panel groups can be customized according to customers' needs.



Model No.	Gas Service	Inlet Connection	Outlet Connection
FLLTX	Oxygen	G1/2" /G3/8" -RH(M)	M12×1.25/ M16×1.5-RH
FLLTX	Fuel Gas	G1/2" /G3/8" -LH(M)	M16×1.5-LH



## Machine-use Cutting Torch Holder

It is an accessory which connecting the cutting torch with the flame cutting machine.



### Structural Features

- ◆ Applicable to WLX machine-use cutting torch
- ◆ Using hand wheels to adjust rise and fall
- ◆ Using hand wheels to adjust horizontally moving distance.
- ◆ Angle scale can show angle of the machine-use cutting torch.

## Plasma Cutting Torch Holder

Applicable to the plasma cutting torch, it has the function of anti-collision and initial alignment, and the inner diameter of the insulation plastic sleeve is 30mm and 35mm.



## Electric Lifter

Applicable to CNC flame cutting machine and plasma cutting machine.

Electric lifter makes it possible for a rotating motor to run linear back and forth by means of screw and screw pair. A electric lifter equipped with corresponding electrical device can achieve the positioning control of the linear motion as well as the limit control.



100



150



200

### Structural Features

- ◆ Different ways of motion can be customized as one needs.
- ◆ It possesses an aluminum integrated structure with compact-size, low mass but high intensity.
- ◆ It adopts high precision liner bearing system which makes the operation more accurately, effectively and enduringly.
- ◆ It is easy to install with reliable performance.

Model No.	Working Voltage	Motor	Working Temperature	Lifting Speed	Lifting Range	Self Weight	Maximum lifting weight
100	DC24V 0.9A	11W	-25~60 C	1200mm/min	max100mm	1.9kg	8.5kg
150	DC24V 1.5A	15W	-25~60 C	1200mm/min	max150mm	3.5kg	14.8kg
200	DC24V 2.2A	30W	-25~60 C	1800mm/min	max200mm	11kg	20kg

## Cable Pulley

It is used to fix the gas tube of flame cutting machine, cable, power cord of planer automatic welding machine and cable of submerged arc welding machine. Several cable pulleys are assembled on the positioned #10 I-beam steel. When the machine runs straight, the cable or gas tube will move on the I-beam steel along with the pulleys. As a result, the machine will not be interfered by power cord or gas tube while working.



I Type



II Type

## Moving Object

Mounted on the beam of multi-headed flame straight strip cutting machine, Moving object is used to fix the cutting torch holder. And the holder fastens the machine-use cutting torch at the other end. Adjust the position of the moving object on the beam according to the width dimensions required by the workpiece, and the moving parts moves with the machine while it is cutting.

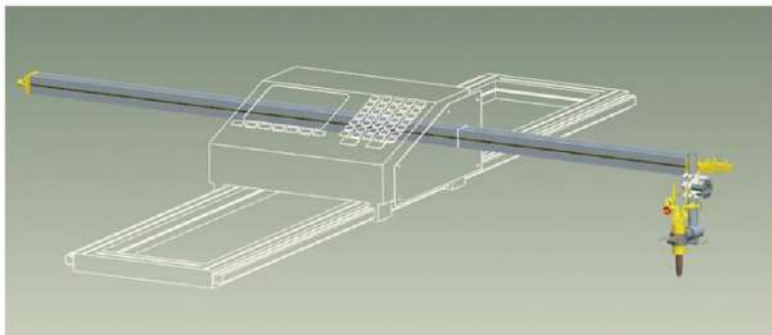


120  
110 x 8



110 x 10

## Portable CNC Cutting Machine Beam



This product is mainly used for the transverse moving of cutting torch, equipped for portable CNC cutting machine. It's compact in structure and professional designed. It has advantages of light in weight, small in size and easy to move. It equips with precise drive system so that to make sure for the more stable transverse moving and higher precision. The complete set consist of one 1800mmx45mmx45mm lightweight aluminum profile, two pieces of input brass, one set of output allocator, one set of anti collision holder, one set of 30mm cutting torch and three pieces of rubber hose.

## Portable CNC Cutting Torch Holder

Applicable to the portable CNC cutting machine for holding the cutting torch, the holding cutting torch O.D. is 30mm.



## Gas Distributor



Product Name	Gas Service	Inlet Connection	Outlet Connection
Two In and Three Out Distributor	Oxygen/Fuel Gas	M16x1.5	M16x1.5



Product Name	Gas Service	Inlet Connection	Outlet Connection
Two In and Six Out Distributor	Oxygen/Fuel Gas	M20x1.5	M16x1.5



Product Name	Gas Service	Inlet Connection	Outlet Connection
Three In and Three Out Distributor	Oxygen/Fuel Gas	M12x1.25	M12x1.25



Product Name	Gas Service	Inlet Connection	Outlet Connection
Portable CNC Cutting Machine Distributor Type I	Oxygen/Fuel Gas	M12x1.25	M12x1.25



Product Name	Gas Service	Inlet Connection	Outlet Connection
Portable CNC Cutting Machine Distributor Type II	Oxygen/Fuel Gas	M12x1.25	M12x1.25

## Portable Electric Lifter

Applicable to the portable CNC cutting machine for holding plasma and flame cutting torches, it has function of automatically control the height and adjust the location.



Portable Type

## GO2 Balanced Pressure Cutting Nozzle



- ◆ It is available when oxygen supply pressure is below 0.6Mpa.
- ◆ With cone angle of 30 degrees, it is suitable for international use.
- ◆ With integrative structure
- ◆ Made of high quality tellurium copper with a long using life
- ◆ Applicable to acetylene
- ◆ Made with advanced techniques of high quality guaranteed
- ◆ 100% flame test

Model No.	Diameter of cutting oxygen mm	Cutting thickness mm	Cutting speed mm/min	Gas Pressure Mpa		Gas consumption(m <sup>3</sup> /h)	
				Oxygen	Acetylene	Oxygen (m <sup>3</sup> /h)	Acetylene(L/h)
00	0.8	5~10	600~450	0.2~0.3	>0.03	0.9~1.3	340
0	1	10~20	480~380	0.2~0.3	>0.03	1.3~1.8	340
1	1.2	20~30	400~320	0.25~0.35	>0.03	2.5~3	470
2	1.4	30~50	350~280	0.25~0.35	>0.03	3~4	470
3	1.6	50~70	300~240	0.3~0.4	>0.04	14.5~6	620
4	1.8	70~90	260~200	0.3~0.4	>0.04	5.5~7	620
5	2.0	90~120	210~170	0.4~0.6	>0.04	8.5~10.5	620
6	2.4	120~160	180~140	0.5~0.8	>0.05	12~15	780
7	2.8	160~200	150~110	0.6~0.9	>0.05	21~24.5	100
8	3.2	200~270	120~90	0.6~1.0	>0.05	26.5~32	1000
9	3.6	270~350	90~60	0.7~1.1	>0.05	40~46	1300
10	4.0	350~400	70~50	0.7~1.2	>0.05	49~58	1600

Note: Cutting conditions:

1. Oxygen purity is above 99.5%
2. Carbon rate of steel material ≤ 0.45%
3. Cutting way: vertical cutting
4. Oxygen pressure refers to cutting pressure before arriving at the cutting torch.

## G03 Balanced Pressure Propane Cutting Nozzle



- ◆ It is available when oxygen supply pressure is below 0.6Mpa.
- ◆ With cone angle of 30degrees, it is suitable for international use.
- ◆ With integrative structure
- ◆ Made of high-quality tellurium copper with a extremely long using life
- ◆ Applicable to propane,propylene and natural gas.
- ◆ Made of pure copper,nozzle sheath is punched into shape once only,with precise dimensions and good-looking appearance.
- ◆ Made of imported high-quality brass,the core is made by CNC lathe with high precision.
- ◆ 100%flame test

Model No.	Diameter of cutting oxygen mm	Cutting thickness mm	Cutting speed mm/min	Gas Pressure Mpa		Gas consumption(m <sup>3</sup> /h)	
				Oxygen	Propane	Oxygen (m <sup>3</sup> /h)	Propane (L/h)
00	0.8	5~10	600~450	0.2~0.3	>0.03	0.9~1.3	340
0	1	10~20	480~380	0.2~0.3	>0.03	1.3~1.8	340
1	1.2	20~30	400~320	0.25~0.35	>0.03	2.5~3	470
2	1.4	30~50	350~280	0.25~0.35	>0.03	3~4	470
3	1.6	50~70	300~240	0.3~0.4	>0.04	14.5~6	620
4	1.8	70~90	260~200	0.3~0.4	>0.04	5.5~7	620
5	2.0	90~120	210~170	0.4~0.6	>0.04	8.5~10.5	620
6	2.4	120~160	180~140	0.5~0.8	>0.05	12~15	780
7	2.8	160~200	150~110	0.6~0.9	>0.05	21~24.5	100
8	3.2	200~270	120~90	0.6~1.0	>0.05	26.5~32	1000
9	3.6	270~350	90~60	0.7~1.1	>0.05	40~46	1300
10	4.0	350~400	70~50	0.7~1.2	>0.05	49~58	1600

Note:Cutting conditions:

1. Oxygen purity is above 99.5%
2. Carbon rate of steel material≤0.45%
3. Cutting way:vertical cutting
4. Oxygen pressure refers to cutting pressure before arriving at the cutting torch.



## HY3 Flame Processor

It produces high temperature flame by combustion of fuel gas and oxygen in order to make sure heating or melting treatment about the metallic and non-metallic material.



## Usage

Applicable to harden the mechanical parts by quenching, as these mechanical parts demands to be anti-wear and not easy to be damaged, such as wheel gear, axle, machine tool bed surface, mill roll, rollers and so on. It also uses for the gas pressure welding for the railway steel rail, steel tube, rolled steel, adjust the flame, it will automatic welding and do the flame scarfing. These years, it is widely used for the flame bent tube technology. Compared with the high-frequency hardening, it has its advantage for less investment and more flexible.

## Structural Features

The structural principle of flame processor is similar to injector torch, low-pressure acetylene and oxygen is well-mixed based on siphon principle. High-pressure oxygen flows into the nozzle through the connecting pipe from oxygen cylinders or other gas storage container. Then it ejects from the vent at the critical speed(oxygen at 20℃,295m/s) injection so that the adjacent acetylene channel is vacuum and the low pressure acetylene is inhaled to mixing chamber. After full mix, ignite them to form the fuel mixture.

Aperture	Mixing Chamber NO.											
	25	30	35	40	45	50	55	60	65	70	75	80
Nozzle d1	Φ0.8	Φ0.9	Φ1.1	Φ1.2	Φ1.4	Φ1.6	Φ1.7	Φ1.9	Φ2	Φ2.2	Φ2.4	Φ2.5
Mixing Chamber d2	Φ2.5	Φ3	Φ3.5	Φ4	Φ4.5	Φ5	Φ5.5	Φ6	Φ6.5	Φ7	Φ7.5	Φ8

## Heavy Type Machine Use Cutting Torch

This product is the assembly product for flame cutting machine, mixed Oxygen with the relevant combustible gas, such as acetylene or propane, then use flame for cutting all kinds of billet steel, ingot steel and thick plate. It also adopts water-cooled structure, which could keep the continuous working in the long-time high temperature bad working conditions.

### Structural Features

- ◆ Thimble length: 400mm- 800mm
- ◆ Outer diameter: 35mm, 45mm
- ◆ Air inlet screw thread: M16, G1/2"
- ◆ Air inlet pipe diameter: 8mm, 10mm, 13mm
- ◆ Water-cooled structure design
- ◆ Water inlet and outlet screw thread: M16x1.5
- ◆ The cutting thickness for thick plate is above 300mm



## HZ-100 Welding Flux Recovery Machine

It is used to reclaim submerged arc flux in its submerged arc welding process of the planer type automatic welding machine for H section steel welding, which comprises whirlpool gas pump and cabinet, and is also equipped with storage tank and discharge tank mounted on the planer type automatic welding machine. It is the suction tube which sucks the flux from the discharge tank into the storage for reuse.



### Standard Configuration

- Rubber tube or transparent tube: 8M
- Stainless steel pipette barrel: 1
- Storage tank: 1
- Discharge tank: 1

## The Chart of Gas Control Panel

Each cutting machine gas control panel includes three pcs of pressure regulator, three pcs of pressure gauge and one set of connecting brass joints.




## Accessories for Piping System

Accessories for connecting the supply gas pipes in the gas piping system.

Picture	Title	Gas Service	Inlet Connection	Outlet Connection
	Big tee joint	Oxygen	G3/4" (M)	G1/2"(F)
	Nut	Oxygen	G3/4" (F)	/
	Hose connector	Oxygen/Fuel gas	Φ13、Φ16、Φ19	/
	Hand valve short joint	Oxygen	G1/2"(M)	ZG1/2"(M)
	Hand valve short joint	Oxygen	M20x1.5-RH(M)	ZG1/2"(M)

## Accessories for gas piping system

Picture	Title	Gas Service	Inlet Connection	Outlet Connection
	Gas valve	Oxygen	M12x1.25-LH(F)	M12x1.25-LH(M)
	Flat-end connector	Oxygen/Fuel gas	Φ13、Φ16、Φ19	/
	Round-head connector	Oxygen/Fuel gas	Φ6、Φ8	/
	Round-head connector	Oxygen/Fuel gas	Φ13、Φ16、Φ19	/
	Direct connector	Oxygen/Fuel gas	Φ6、Φ8、Φ10	/
	Reducing connector	Oxygen/Fuel gas	Φ13	Φ6、Φ8、Φ10
	Tee connector	Oxygen/Fuel gas	Φ6、Φ8、Φ13	Φ6、Φ8、Φ13
	Reducing tee connector	Oxygen/Fuel gas	Φ8、Φ16	Φ13-Φ8、Φ19-Φ16
	Screw connector	Oxygen	Φ6、Φ8、Φ13	ZG1/4", ZG1/2"
	Pressure gauge connector	Oxygen/Fuel gas	Φ6、Φ8	/
	Adjustable nut connector	Fuel gas	Φ13、Φ16	M16x1.5-LH(F)
	Nut	Oxygen	M12x1.25-RH(F)	/
	Nut	Fuel gas	M16x1.5-LH(F)	/
	Jam nut	Oxygen	M20x1.5-LH(F)	/
	Chock Plug	Oxygen	M16x1.5-RH(F)	/

## Accessories for gas piping system

Picture	Title	Gas Service	Inlet Connection	Outlet Connection
	Screw	Oxygen	M22x1.5-RH(M)	/
	Screw joint	Oxygen	M16x1.25-RH(M)	ZG1/4"(M)
	Screw long joint	Fuel gas	M20x1.5-LH(M)	G1/2"-RH(M)
	Screw long joint	Oxygen	M20x1.5-RH(M)	ZG 3/8"-RH(M)
	Nut-screw (pressure gauge)	Oxygen	M12x1.25-RH(M)	M14x1.5-RH(F)
	Nut-screw (pressure gauge)	Fuel gas	M12x1.25-LH(M)	M14x1.5-RH(F)
	Adjustable Nut Joint	Oxygen/Fuel gas	M12x1.25/M16x1.5	ZG 1/4"
	Adjustable right angle joint	Fuel gas	M12x1.25-LH ( F )	M12x1.25-LH ( M )
	Tee screw	Fuel gas	M20x1.5-LH ( M )	G1/2"-RH(M)/ M12x1.25-LH ( M )
	Tee long screw	Oxygen	M20x1.5-RH ( M )	G1/2"-RH(M)/ M12x1.25-RH ( M )
	Adjustable tee joint	Oxygen	M12x1.25-RH ( M )	M12x1.25-RH ( M ) / M12x1.25-RH ( M )
	Cross screw	Oxygen	M20x1.5-RH ( M ) / M12x1.25-RH ( M )	M12x1.25-RH ( M ) / ZG1/2"LH(M)
	Gear rack	Oxygen/Fuel gas	/	/
	Lineation pen	Oxygen/Fuel gas	/	/
	Water spraying and cooling device	/	M12x1.25-RH ( M )	Φ2

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