CRUXWELD®

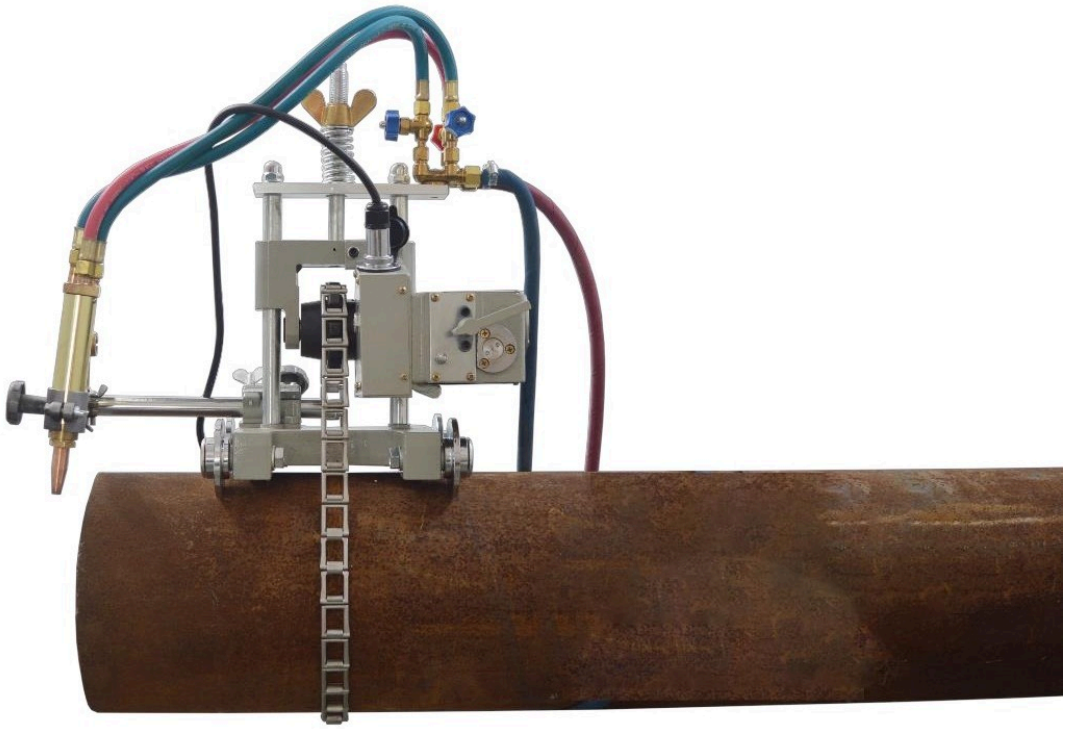
INDUSTRIAL EQUIPMENTS PVT. LTD.

TUBOCUT PYTHON

Automatic Pipe Gas Cutting & Bevelling Machine

Motorised chain drive | Pipe Ø 100 mm and above | Wall 5-100 mm | Bevel up to 45°

Previous model name: TUBOCUT-CS



OPERATING INSTRUCTIONS

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INSTRUCTION

Thank you very much for purchasing this product. Read this instruction manual thoroughly to insure correct, safe and effective use of the machine. Read the manual first to understand how to operate and maintain the machine.
Make sure you read, understand and take all the necessary safety precautions.

SAFETY PRECAUTIONS

This product is designed to be safe, but it can cause serious accidents if not operated correctly. Those who operate and repair this machine must read this manual thoroughly before operating, inspecting and maintaining the machine. Keep the manual near the machine so that anyone who operates the machine can refer to it if necessary.

- Do not use the machine carelessly without following the instructions in manual.
- Use the machine only after you completely understood the contents of the manual.

·If an explanation in the manual is difficult to understand, contact Cruxweld or its sales service office.

- Keep the manual nearby at all times and read it so many times as necessary for a complete understanding.

·If the manual become lost or damaged, place an order with Cruxweld or its sales service office for a new one.

- When transferring the machine to a new owner, be sure to hand over this instruction manual as well.

QUALIFICATIONS FOR MACHINE OPERATOR

Operators and repair staff of this machine must completely understand the contents of the instruction manual and they must be qualified and educated to handle this equipment.

1. The license for gas welding ganger
2. The diploma of the training course on gas welding.
3. The qualification certificate approbated by the ministry of labor.

Symbol	Title	Meaning
	General	General caution, warning and danger
	Be careful not to get your fingers caught.	Possible injury to fingers if caught in the insertion part.
	Caution: Electric shock!	Possible electric shock under special conditions.
	Ground this equipment.	Operators must ground the equipment using the safety grounding terminal.
	Pull out the power plug from the outlet.	Operators must unplug the power plug from the outlet when a failure occurs or when there is a danger of lightning.
	Caution against bursting	Possible bursting under certain conditions.
	General	General warning.
	Caution: Hot!	Possible injury due to high temperature under certain conditions.
	Caution: Ignition!	Possible ignition under certain conditions.

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1 Safety instruction

Operation, inspection, and maintenance that are against the basic safety rules can cause many accidents. Carefully read, understand, and master the safety measures and precautions described in this instruction manual and on the machine before operating, inspecting, and maintaining the machine. The safety messages are classified as following.

- WARNING 

This word is used as a warning message or a warning label. It is positioned at places that could cause injury or serious accident.

- CAUTION 

This word is used as a caution message or a caution label. It is positioned at places that could cause slight injury or machine damage. This is also used as a caution for high dangerous actions.

- NOTICE SIGNS 

This is a sign to show machine operators and maintenance engineers items that relate directly to damage of machines and surrounding facilities and equipment.

1.1 General machine safety precautions

Read and understand the following important safety information:

1.1.1 Machine safety

1. The machine casing is mainly made of aluminum alloy to reduce weight. For this reason, be careful not to drop a heavy item on the machine, or not to drop the machine when carrying it, since the alloy is not designed to withstand such impact.
2. When fixing hoses to the torch and distributor, tighten the nut with the attached wrench. After fixing, be sure to check there is no gas leak with a detection liquid. If a gas leak is found, retighten the nut firmly.
3. When fixing a tip to the torch, tighten the nut with the two wrenches. In addition, avoid damaging the taper part of the tip since this may cause backfire.
4. Never disassemble the machine other than during maintenance and inspection. Malfunction will occur.
5. Never remodel the machine. Remodeling is very dangerous.
6. Must cut the power off when the machine is not in use.
7. Never use the machine outdoors when the weather is wet. This will cause failure of the machine and could cause a fatal accident due to electric shock.

1.1.2 Safety clothing

1. Be sure to wear protector’ s gauntlets, goggles, helmet, and safety shoes during operation.

2. Avoid operating the machine with wet clothes or hands in case of accidents.

1.1.3 Safety precautions before operation and carrying

1. Read this instruction manual before operating the machine.
2. Fix the machine rightly and adjust a suitable range before operating.
3. Make sure the power switch is on " OFF" position of changeover switch is on " STOP" position before turning on power.
4. Prior to operating the machine, check the safety of the surroundings to avoid accidents.
5. Never move the machine while the preheating flame burns.
6. When cutting on high place, you should be care of splash and dross in case of damaging people.
7. Don' t knock roller wheel.
8. The loose of chain may lead to dislocation.
9. You should equip the machine carefully and don' t make your hands be in the middle of beam and carriage.
10. When you adjust chain, you must not make the machine slip from pipe.
11. Don' t make you hands be in rotating members, such as chain, chain gear and roller wheel.
12. Direction changeover switch

- The direction changeover switch is used to change the direction of clockwise revolution/anti-clockwise revolution of machine. Check the running direction or the direction of knob before cutting.
- When changing the direction of running, you should make the driving button be on the " stop" position. And change the direction of running after the machine comes to a full stop.

Instruction: Before the power is turned on, it is necessary to check if the driving button is on the " stop" position. It is very dangerous to operate the machine when the driving button is on the " on" position.

13. Don' t use rusty or distorted chain.
14. Don' t confound the upper margin of chain with lower band.
15. The number of chain should match with the external diameter of pipe.
16. You must close preheat valve and fuel gas valve when checking the running of the machine before operation and cutting allocation.
17. When you don' t use the machine, you shouldn' t make the machine be on the pipe.
18. If the machine falls down, it may reduce the length of life and damage gas valve to lead to gas leakage.
19. You must not drag the cable of power supply.
20. Don' t put the machine on soil or muddiness.
21. Don' t leave the machine alone before it flames out.

22. You must use hose-hoop in case of dangers.
23. When the fuse burns out frequently, it is not allowed to use high-current fuse before finding out the cause.
24. When carrying the machine, you must hold the handlebar and can't hold other sections.

1.1.4 Electrical system precautions 

1. Check the input power voltage of the machine before operation. The input power voltage should be in the range of ±10% of the rated voltage. The machine should not be operated out of this range.
2. The metal plugs are screw-threaded. Therefore, you should tighten them so that they will not loose during operation.
3. Be sure to ground the power cable of the machine.
4. **Stop operation and cut off the power in the following cases, and ask a qualified electrician to repair the machine.**
   1) Broken or abraded cables.
   2) Leak of water or liquid, which damages the machine.
   3) The machine operates abnormally despite of operating the machine according to the instruction manual.
   4) Machine is broken down.
   5) The machine has a poor performance and needs to be repaired.
5. Periodically inspect the electrical system.

1.1.5 Maintenance and inspection precautions 

1. Ask a qualified electrician to perform repair and inspection service.
2. Disconnect the power plug before inspecting and repairing the machine.
3. Maintain the machine periodically.

1.2 Gas cutting safety precautions

Strictly observe the safety rules and precautions to ensure the safety of gas cutting operations. Operators and supervisors MUST keep " safety" in mind.

1.2.1 Prevention of explosion 

1. Never cut pressurized cylinders or hermetically sealed containers.
2. Ensure sufficient ventilation for gas cutting to prevent the air from being polluted.

1.2.2 Pressure regulator safety precautions 

1. Before operating, check that all pressure regulators are operating correctly.
2. Ask a skilled repair engineer to perform maintenance and inspection service.
3. Do not use malfunctioning pressure regulators or pressure regulators from which gas is

leaking.

4. Do not use pressure regulators smeared with oil or grease.

1.2.3 High pressure gas cylinder safety precautions 

1. Never use broken cylinders or cylinders from which gas is leaking.
2. Install cylinder upright and take measures to prevent them from falling.
3. Use cylinders only for specified purposes.
4. Do not use pressure regulators smeared with oil or grease.
5. Install cylinders in a place free from heat, sparks, slag, and open flame.
6. Contact the distributor if the container valves will not be opened. Never use a hammer, wrench, or other tools to forcibly open container valves.

1.2.4 Safety precaution for hoses 

1. The oxygen hose is used for transporting oxygen gas only.
2. Replace cracked hoses or other hoses damaged by sparks, heat, unshielded fire, etc.
3. Install hoses without twisting.
4. Take great care during operation and transportation to prevent hoses from breakage.
5. Do not drag the hoses when moving the machine.
6. Periodically check the hoses for damage, leakage, fatigue, loose joints, etc, to ensure safety.
7. Cut hoses to the minimum possible length. Short hoses reduce hose damage and pressure drop, as well as reduce the flow resistance.

1.2.5 Safety precautions for fire 

Take safety precautions to avoid fire before cutting.

It could cause a fire due to ignoring hot metal, sparks, and slag.

1. Keep a fire extinguisher, fire extinguish sand, bucket full of water, etc. be ready on the site where gas cutting is performed.
2. Keep flammables away from the cutting area to avoid splashing sparks.
3. Before bringing the hot steel plates, as well as hot cut parts or scrap, to flammables, you must cool down them.
4. Never cut containers, which flammable materials are stuck to.

1.2.6 Safety precautions for skin burns 

Observe the safety precautions to avoid burning skin. It could cause a fire or burning skin due to ignoring heat, spatter, and sparks during operation.

1. Do not perform cutting near flammables. (Move flammables well away from the sparks.)
2. Do not cut containers filled with flammables.

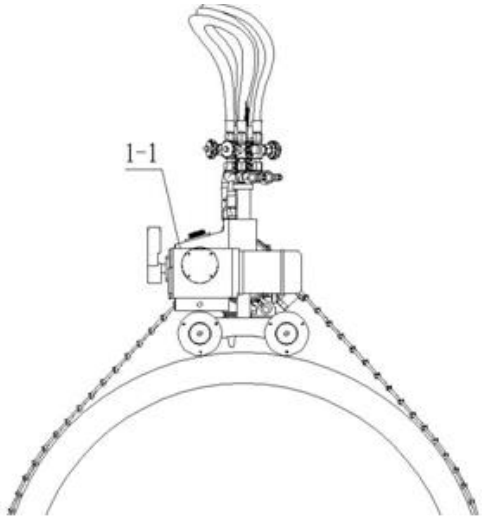
3. Do not keep lighters, matches, and other flammables nearby.
4. Flames from the torch will burn the skin. Keep your body away from the torch and tip, and check the safety before operating the switches and valves.
5. Wear the correct protectors to protect your eyes and body.
6. Correctly tighten the tip to prevent backfire.
   - When fixing a tip to the torch, tighten the nut with the two wrenches attached.
   - If the tip is tighten excessively, it will be heated during cutting and tightened still more, making it difficult to remove the tip.
   - Avoid damaging the taper of the tip because it may cause backfire.
7. Check any leakage of gas from the connection part of the distributor, hoses and torch with soapsuds.

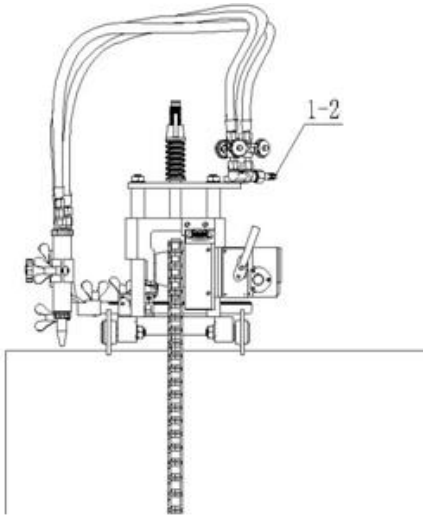
   You must not use oil or grease on the connection of the oxygen pipe to avoid backfire. Because it may lead to explosion.
8. Check the following when igniting:
   - Place the torch on the torch holder before igniting.
   - Always wear the required protectors (gauntlets, helmet, goggles, etc.)
   - Check for any obstacles, dangerous materials and flammables near or in the direction of cutting.
   - Check the gas pressure. (The pressure must be in the right range)
9. When the temperature of torch and tip are high, you must wear gauntlets to carry them. The surface temperature of them is very high after cutting, so you don’ t touch them even you wear gauntlets.

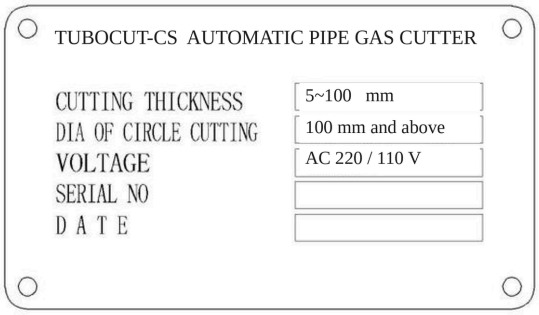
2 Location of safety labels

Safety labels and other labels for correct operation are affixed to the machine.

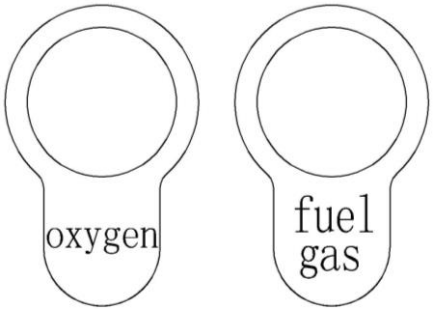
1. Carefully read the labels and follow the instructions on them when operating the machine.
2. Never remove the labels. Keep them clean and legible at all times.







1-1 Date label



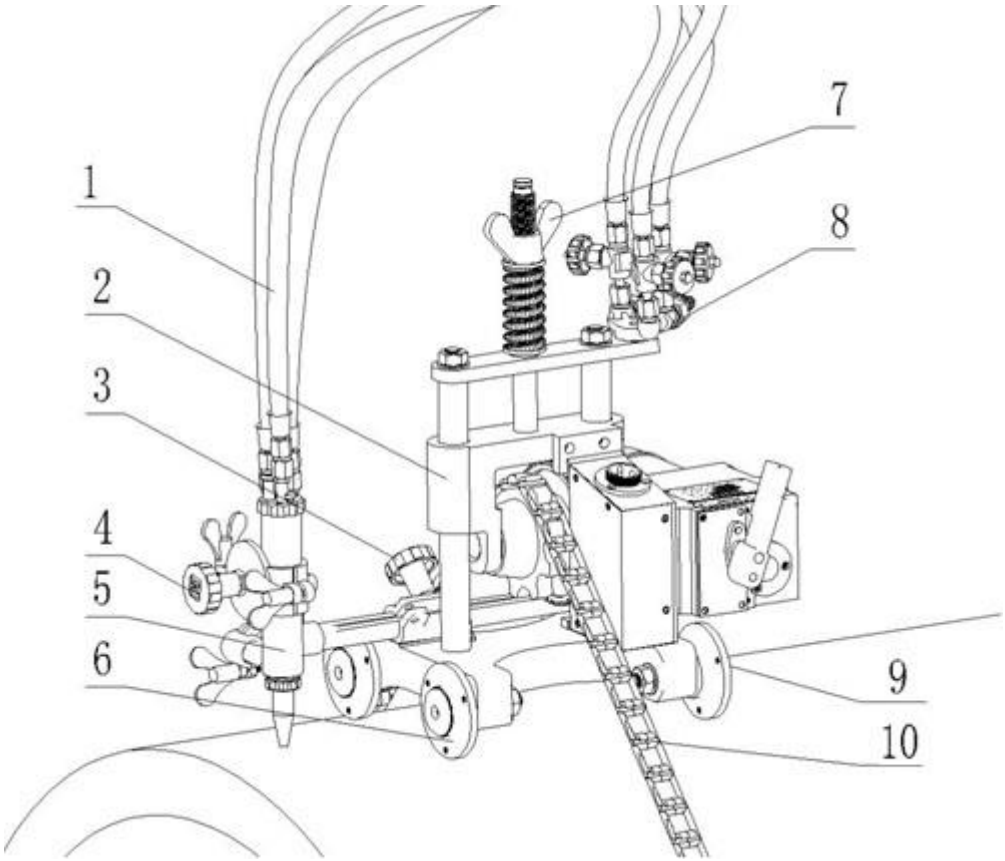
1-2 Safety label

3 Outline of machine

3.1 Characters

"TUBOCUT PYTHON" pipe gas cutter is small pipe cutter, the development of which is based on investigation of actual cases. It has good performance to cut various pipes and groove cut. The machine adopts motor shift driving, which has many merits, such as high precision and smooth. It uses chains to lock pipe and you can increase or decrease chain according to the diameter of pipe. The machine is made of A-alloy. It has impacted structure, light weight and can cut continuously.

3.2 Name and function of each section



1.Hose: Connect them to gas distributor. There are three hoses: preheating oxygen hose, fuel gas hose and cutting oxygen hose.	6.Roller wheel : To make the machine walks smoothly on the pipe wall.
2. Sliding support	7. Wing nut: Revolve it to tighten the chain to fix machine on pipe.
3.Cross feeding hand wheel : To adjust horizontal position of torch.	8.Gas distributor: Gases are preheating oxygen, fuel gas and cutting oxygen.
4.Lift hand knob of torch: To adjust the height of torch.	9.Body
5. Torch: The cutting thickness is 5-100 mm	10. Chain

3.3 Specifications

1.Weight(body)	16.5 kg
Accessory	7.8 kg
2. Machine dimension	420 x 280 x 550 mm
3. Power source	AC 220 V / 110 V ±10%
4. Cutting speed	50~1150mm/min
5. Cutting thickness	5-100 mm
6. Groove angle	0°--45°
7. Cutting diameter	ø100 mm and above
8.Tip	G02 (acetylene) / G03 (propane)
9. Motor	DC motor, 20 W, 10,000 r/min

Accessory	
Tip G02 (acetylene) or G03 (propane) #1,#2,#3	1 pc each
Tip cleaner	1set
Chain(82 chain shackle)	1set
Electric appliance case	1pc
Wrench	1pc
Fuse	2pcs
Notice: The standard chain covers pipes up to 600 mm diameter. If the cutting diameter is above 600mm, you should increase chain which need be purchased.	

4 Preparation for operation

4.1 Contents of package

Carefully take the machine out of its case.

The contents of the standard package are shown below. Check them carefully before assembling the machine.

1) Main body	1set
2) Standard torch unit assemblage	1set
3) Connector of torch	1set
4) Electric case	1set
5) Tip cleaner	1set
6) Tip G02 (acetylene) / G03 (propane)	1pc each
7) Chain(82 chain shackle)	1 set
8) Fuse (2A)	2 pcs
9) Specification sheets and certificate of qualification	1 pc each

4.2 Machine assembly

1.Take the machine out of case.

2. Connect the horizontal bar and torch (tool: screwdriver)

Push the horizontal bar out of sliding support and tighten wing screw and butterfly screw bolt (M6X20).

3.Take the torch assemblage out and put the torch connector into receiving end of cross horizontal bar (gear rack). Then, fix it with wing screw (M6X16).

4.3 Preparation for operation 

4.3.1 Power cable connection

1. Before plugging the metal plug into the socket on the guidance panel, you must ensure there is no sundry or dust.
2. The metal plugs has threads, therefore, you should fully tighten them so that they will not loose during operation.

4.3.2 Tip connection

1. Select a proper tip according to the thickness of the steel plate and fix it to the torch. (Refer to the cable of Cutting Data to select a tip)
   - When fixing a tip to the torch, tighten the nut with the two wrenches.
   - If the tip is tightened excessively, it will be heated during cutting and tightened still more, making it difficult to remove the tip.
   - In addition, avoid damaging the taper of the tip since this may cause backfire.

4.3.3 Determine the link of chain

The relation between the external diameter and link of chain is in the following:

Y=X+11

Y: Link of chain

X: the external diameter (cm)

Such as the external diameter 114.3mm=11.42cm=12cm

Y=X+11

X=12+11

So, it need 23 links of chain.

4.3.4 Fix the machine on the pipe

1. After calculate the links of chain, you should put the body on the pipe. Then, revolve the wing nut to lower the sliding support.
2. Make the chain engage with chain gear and fix the chain on the pipe. As shown in following diagram.
3. Revolve the wing nut clockwise to fix the body to the pipe. Don’ t exceed the limit of spring. There should be 1-2mm space.
4. Hold the machine with your hands and part the clutch. Revolve the wing nut 2-3 times left and right in the range of 120°. In this way, it can tighten the chain in case of loose.
5. After equipment, you should cut power in and make the machine walk a cycle along the pipe to check whether the machine walks well and the length of hoses and wires are long enough. You should also check whether the tip can reset.

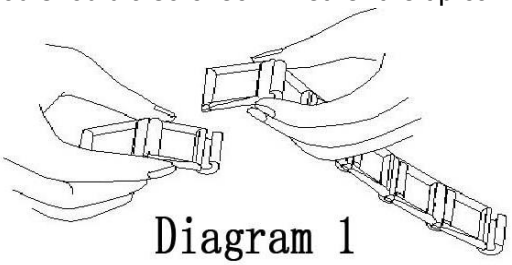


Diagram 1

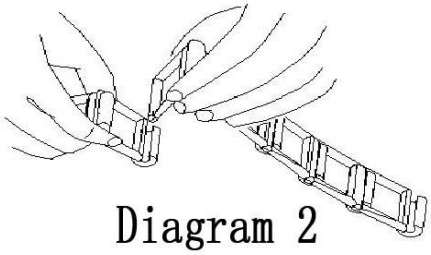


Diagram 2

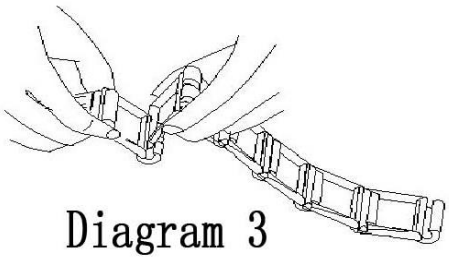


Diagram 3

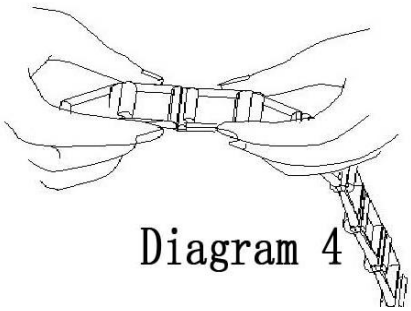


Diagram 4

4.3.5 Try the machine

After equipment, revolve the device a circle to check whether it is fixed well and the hoses and wire are long enough. The device can revolve automatically or revolve in manually operation.

Revolve automatically It operates by body and electric case.

Body:

Cut the power in and operate the motor switch in electric case to try the machine. When the device runs, you can adjust the cutting speed.

Revolve in manually operation:

You should part the clutch of driving sections. Then, hold cutter and revolve it lightly. After trying, you should combine the clutch.

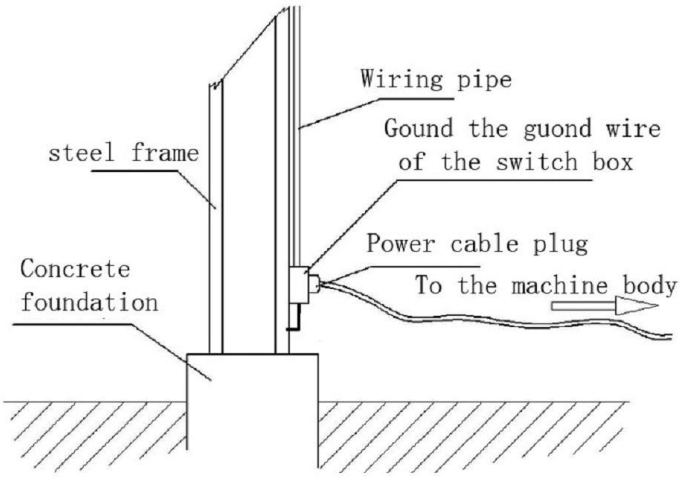
5 Cutting operation

5.1 Safety precaution before operation

5.1.1 Safety precautions for grounding the machine

The cable of this machine is equipped with a grounding wire.

For safety, be sure to ground the wire as follows, in addition to checking the connection of the power cable. (As shown in diagram)



- Grounding method:

As shown in diagram, the simple method of grounding is that connect the grip to steel frame. If there is a grounding wire, you should connect grip to the wire.

5.1.2 Tip choose

Refer to the cable of Cutting Data and select a proper tip according to the thickness of the steel plate. You should choose a bigger grade tip if the steel is rust-eaten seriously or the cutting angle of groove is bigger than 20°.

5.1.3 Operation of the changeover switch

1. The changeover switch is used to change forward or backward direction. Before cutting, you should check the cutting direction.
2. If you want to change the cutting direction, you should make the driving button be on the " stop" position, then change the cutting direction after the machine stops.

NOTE: Before you turn on power, it is necessary to check if the driving button is on the " stop" position. It is very dangerous if the driving button is on the position of " on"

5.1.4 Ignition and flame adjustment

NOTE: Adjust the gas pressure according to the Cutting Data. The data shows the pressure of all valves which are open. Readjust the pressure after ignition.

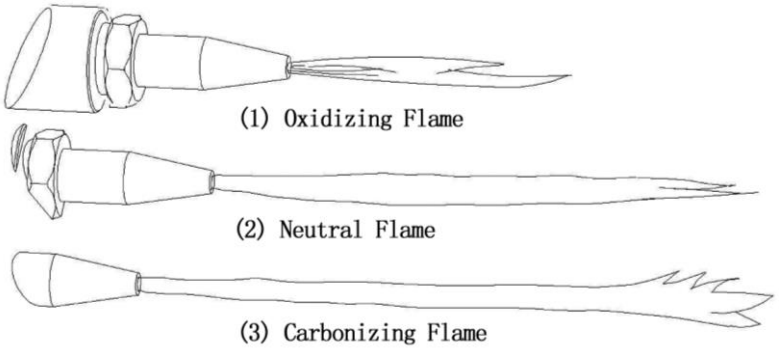
1. First, cut gas supply in and put hoses in order to make the machine move freely.
2. Open the fuel gas valves 1/4 a turn, the preheating oxygen valves 1/2 a turn, and light the torch with an igniter.
3. Then, open the preheating oxygen valve gradually until a white cone of the standard flame gas been obtained. (The incandescent area should be uniform and about 5-6 mm in length.)
4. Open the cutting oxygen value fully. Readjust the flame if its state has changed. A disorderly flow of cutting oxygen will adversely affect the quality of the cutting surface. In such a case, close the preheating oxygen valve and fuel gas valve. You should clean the tip with a suitable needle

while the cutting oxygen is flowing.

5. Appropriate distance between the end of tip and cutting surface:

- Acetylence gas ……..8-10mm
- LPG gas ……..5-8mm

6. Neutral flame ensures a good quality of cutting surfaces. (Oxygen flame may be used for groove cutting.) Oxygen flame causes short cutting-oxygen current, allowing slugs to adhere, melting the upper edge of the cutting surface, and causing adverse effects on the cutting surface. Similar defects will occur when the pressure of cutting oxygen is too high.



5.2 Methods of cutting and piercing

1. Cut from the end of steel plate.
2. Pierce steel plate before cutting.
3. Drill a hole before cutting.

■ Piercing method

1) Ignite and adjust the flame.
2) Thoroughly preheat the cutting point until it is on state of white hot.
3) Open the cutting oxygen valve to make the flame pierce the steel plate. The tip should be about 15-20 mm from the plate to prevent slag from splashing onto the tip and adhering there, which will shorten the working life of the tip

5.3 Cutting operation and steps of blanking flame

1. Align the tip with cutting start point and ignite, then adjust the flame.
2. Preheat the cutting start point fully.
3. After preheating, you should open cutting oxygen valve above 1/8 a turn. Cut power in and the machine begins to run (Refer cutting data of pressure).
4. Check the cutting state and use hand knob to control cutting speed. You can refer cutting data to check cutting speed.
5. Blank the flame in the following steps after cutting after cutting.

1)Close cutting oxygen valve.

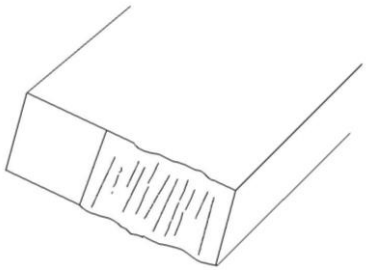
2) Close preheating oxygen valve

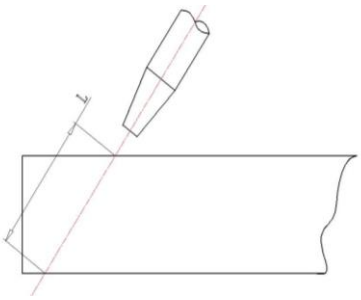
3)Close fuel gas valve.

5.4 Groove cut

When cutting groove, use the angle (use 5°as its basic unit) on the torch holder and allocate the

torch on an expected angle. When choosing a tip for groove cutting, the thickness of the steel plane is “ L” as shown in following picture. In order to compensate the over-dose heat loss due to the groove cutting, the operator should choose an upper rank tip based on the Cutting Data. Slight oxygenized flame will lead to an increase of efficiency and set the speed with a decrease of 20%-30%.The groove cutting surface in the diagram is a result of inadequate preheating, which requires to choose tip again and readjust preheating and speed.





When you cut 6mm sheet, you should choose suitable tip and pressure according to cutting data. Then, adjust weak flame and begin to cut. At the time of cutting, if the pressure of cutting oxygen is too big or preheating too much, it may lead to bad separation or having dross at the bottom of cut.

5.5 Speed setting

When the roller wheel starts to operate, you should adjust cutting speed according to thickness of steel. It can increase the cutting speed along “ 0” toward “ 10” clockwise, and decrease the speed along “ 10” toward “ 0” anti-clockwise.

5.6 Safety measures against backfire and flashback

5.6.1 Prevention of backfire

Backfires may cause serious accidents or fire. Be careful to prevent such disaster. When a backfire occurs, you should find the cause. Inspect and maintain the machine correctly before using the machine again.

The followings are causes of backfire:

1. Improper gas pressure adjustment.
2. Overheated tip
3. Dross clogging in tip
4. Damages to the tapered section of tip or torch will cause backfire.

5.6.2 Prevention of flashback

Flashback could cause fire and damage the machine. If there be a hissing sound in the torch, you should quickly take the following action:

1. Close the preheating oxygen valve.
2. Close the fuel gas valve.
3. Close the cutting oxygen valve.

If flashback occurs, you should find the cause and take appropriate action before using themachine again.

6 Maintenance and inspection

Refer to the following points for maintaining and inspecting the machine in order to use the machine under the best conditions.

6.1 Gear case maintenance

Because there are gears and worms that run at a high speed in the gear case, so the operator should remove the shell of the machine, take out the gear case and wash the gears and the case with detergent every six months. When reassembling, we should put new lubricant into the machine.

If the turbine is abraded, we must change a new one.

6.2 Magnetic roller wheel maintenance

The magnetic roller wheels are important parts of machine. So, it is important to maintain and service them.

(1)In the process of using, the magnetic roller wheels must not be knocked or damaged.

(2)In the process of cutting, you should avoid that the high temperature flame ejects directly.

(3)There is enough lubricant between central axis of two ends of roller wheel and copper sheathing. At the bottom of machine, every leg has oil holes. You should add lubricant into them periodically.

(4)Keep the surface of roller wheel clean. Clean iron chips or dross with metal brush.

6.3 Tip maintenance

The durability and security of the tip used in "TUBOCUT PYTHON" cutter is very good. The operator should abide the right maintenance and operation precautions in order to ensure cutting quality.

1. Put the torch up a little and keep a 15mm distance from the plate when piercing, in order to avoid damaging the tip by backfire.
2. Clean the jet hole of the tip carefully using suitable dip washer.
3. Pay attention not to damage taper seat.

Replace the tip if the following cases occur.

a. The injection stream of cutting oxygen can’ t extend straightly after clean.

b. The injection stream of cutting oxygen bifurcates at the end.

c. The click may be heard from the tip when cutting.

d. The gas leaks and burns at the hold-down nut.

e. The preheat flame is out-of-flatness.

7 Troubleshooting

1)The power motor does not run.

Possible Cause	Check	Correction
Speed controller is bad.	Take SCR resistor apart and check whether the resistor is good. connect the ①1 and②2 or②2 and③3 ,if the resistor is good, the value should be 0-4.7KΩ .	Change
The control is bad.	If 1) is good, the control must be bad.	Replace the control.

2)The motor runs, but the device doesn· t run

Possible Cause	Check	Correction
Mechanical breacdown	Take the reduction box apart and check the clutch.	Take apart and clean.
The reducing gear runs in the air.	When the motor runs normally, the gear runs in the air even if you connect changeover switch or about the gear by your hands.	Replace

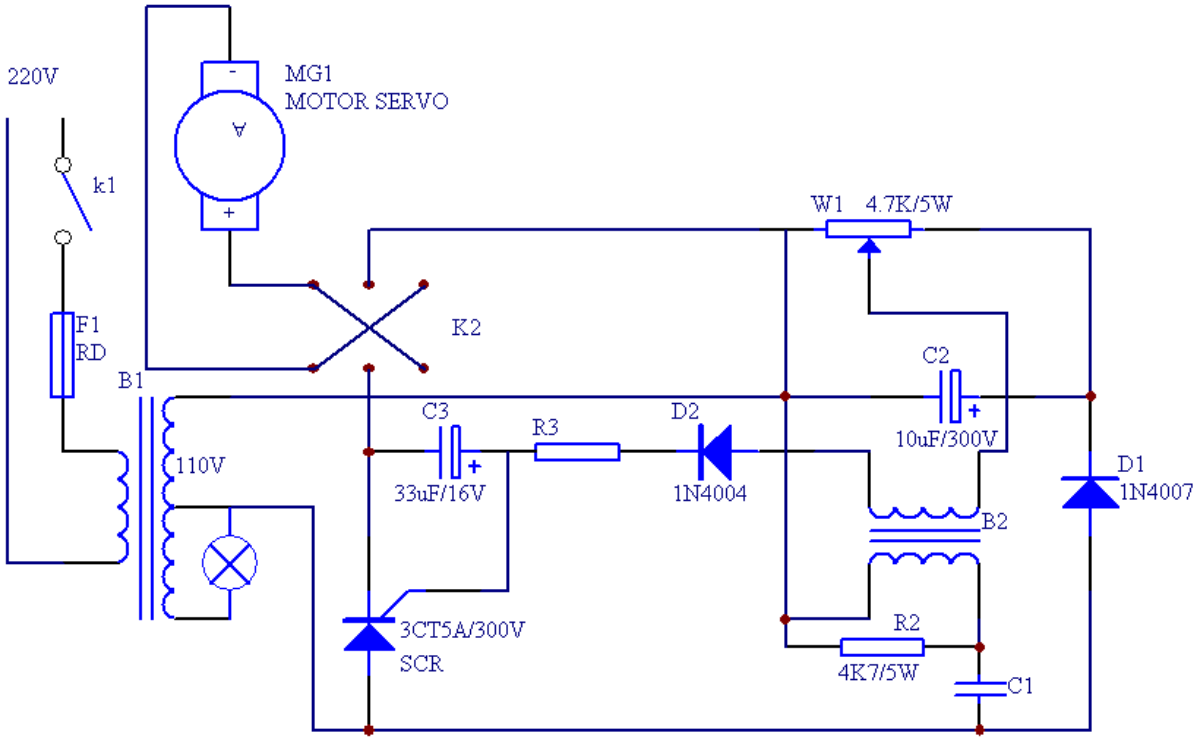
3)The motor does not run.

Possible Cause	Check	Correction
No power	Check the power circle	Change
Power wire is broken	Check it with test instrumentation.	Repair or change
Wrong connection	Check the connections.	Correct the connections.
Switch accident	Take the panel of adapter to check.	Replace the switches.
Resistance accident	Check resistance. Is should be 50KΩ	Replace
Carbon brush of resistor is not contacted well.	Check it with detector. If finger guide is not stable, the resistor is bad.	Replace
The wire is broken.	Check wires with detector	Replace
Carbon brush of motor is not contacted well.	Take the carbon cat and carbon brush apart and check the length and elastane of carbon brush.	Repair or change
Winding accident of motor.	If all the above is good, there must be the winding accident of motor.	Repair or change motor
The control is bad.	If all the above is good, the control must be bad.	Replace the control.

4) The device doesn’ t run normally.

Possible Cause	Check	Correction
Run too fast.	The voltage is abnormal.	Check the voltage
It can’ t run at a small speed.	Resistor accident.	Replace resistor.
	Wire accident.	Repair wire.
	Motor accident.	Repair or Replace the motor.
	Controller accident	
It can’ t run at a high speed.	The voltage is not enough	Check the voltage.
Libration	The gear is broken.	Replace
	The pin of clutch is broken	Repair or replace
	The axis or driving wheel is loose.	Repair or replace
	The rail is broken or there is foreign body in the rail.	Repair
	The hoses or insulating wires influent the stabilization of device.	Operate it carefully.
	Guide rail accident	Repair or replace
	There are cracks on the driving device and driving wheel or the external material is broken.	Repair or replace

8 Wiring diagram



9 Maintenance illustration

If you operate the machine according to the operating manual and the machine generates occurs accidents because of the product quality, we guarantee to keep the machine in good repair free of charge in half year based on invoice from the day we sell. According to the rules, if the following cases occur, we can’ t keep the machine in good repair free of charge:

1)The damages are leaded because of incorrect carriage or improper keeping.

2)The damages are leaded because of operating not according to the instruction manual and beyond the specified range of voltage.

3)The machine don· t have maintenance card and receipt invoice.

4)The maintenance card don· t match the machine.

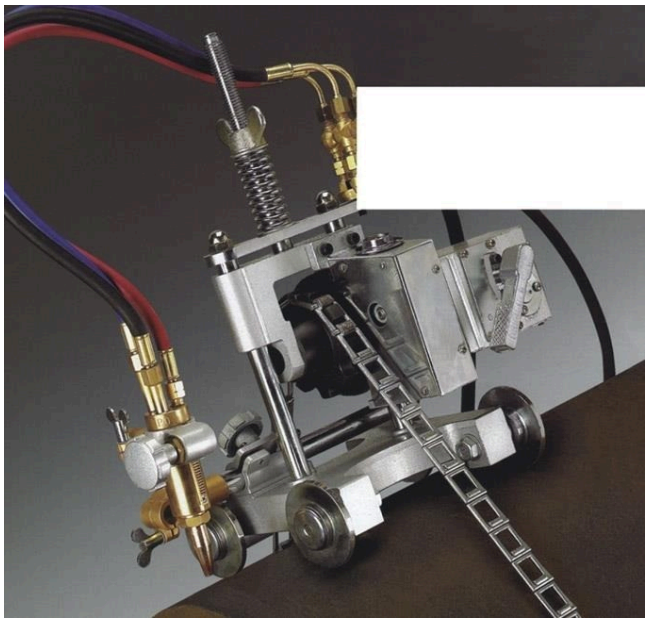
5)The damages are leaded by natural disasters or some irresistible incidents.

6)The damages are leaded because the machine is token apart by unprofessional person

7)The damages are leaded because of using the fitting parts and accessories, which are not are supplied by Cruxweld.

(Illustration: Do not inform if the specifications and technical contents of the machine have been modified!)





TUBOCUT PYTHON automatic pipe gas cutter - torch unit and chain drive

CRUXWELD®
INDUSTRIAL EQUIPMENTS PVT. LTD.

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