PULL ARC OF STUD INVERTERWELDER

USER'S MANUAL

MODEL:AS-2500

Foreword

Thank you for using inverter welder!

For important safety of bodies, please read this manual and understand its contents before operate.

Safety Caution!

On the process of welding or cutting, there will be any possibility of injury, so please take protection into consideration during operation. More details please review the Operator Safety Guide, which complies with the preventive requirements of the manufacturer

Electric shock—may lead to death!!

- **Set the earth fitting accordign to applying standard.**
- **It is forbidden to touch the electric parts and electrode when the skin is naked,wearing wet gloves or clothes.**
- **Make sure you are insulated from the ground and the workshop.**
- **Make sure you are in safe position.**

Gas — may be harmful to health!

- **Keep your head out of the gas.**
- **When arc welding,air extractor should be used to prevent from breathing gas.**

Arc radiation — Harmful to your eye and burn your skin.

- **Use suitable helmet and light filter,wear protective garment to protect eye and body.**
- **Use suitable helmet or curtain to protect looker-on.**

Fire

- **Welding spark may cause fire,make sure the welding area no tinder around.**

Noise — extreme noise harmful to ear.

- **Use ear protector or others means to protect ear.**
- **Warn that noise harmful to hearing if looker-on around.**

Malfunction — When trouble,count on the professionals

- **If trouble in installation and operation,please follow this manual instruction to check up.**
- **If fail to fully understand the manual,or fail to solve the problem with the instruction,you should contact the suppliers or our service center for professional help.**

CAUTION!

Creepage-protecting switch should be added when using the machine!!!i

1. Primary use and applicability range

Welcome to choose the pull arc of stud inverter welder. This stud welder adopts microprocessor control .with energy storage capacitor is a sort of equipment that through capacitor as the storage element, using the space discharge between the stud and the pieces and forming the unstable arc instantly. It makes use of the heat of arc melting the interface between the stud and the pieces, then form the welding joint.

It is mainly used to weld all kinds of standard component of, mild steel, stainless steel, aluminum alloy, such as the mild steel or stainless steel closet, the meter case, the car case, hardware, aluminum alloy ceiling etc.The welder has the virtue of small spatter, fine welding surface, quick welding speed, especially for sheet metal welding.

2. Working condition and environment

(1) Height above sea level can't exceed 1000 m.

(2) Select welding current according to rated duty cycle in the specification and Technical Parameters list.

(3) No acid or alkaline caustic gases and other toxic industry gases and flammable gases in the welding environment.

(4) While welding, the environment temperature range should be

-10 ~ 40℃ (air-cooling)

-25 ~ 55 ℃ (in transmit or in the deposited)

(5) Power supply

The fluctuant range of voltage should be 220V±15%

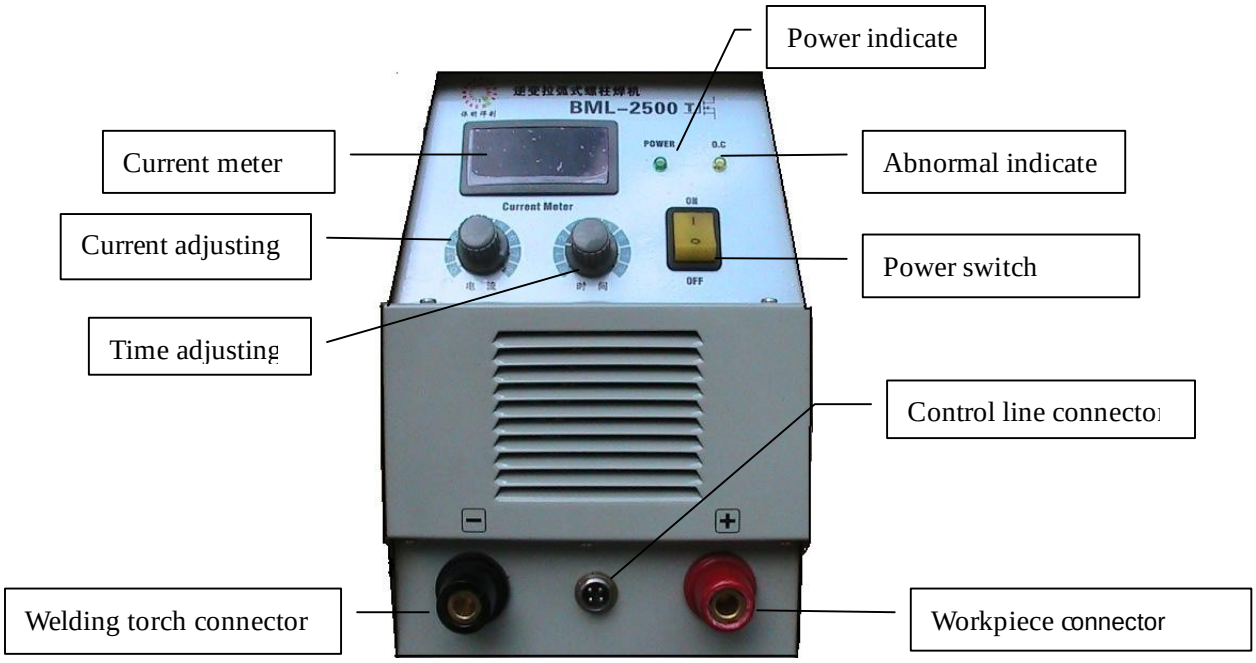
The fluctuant range of frequency should be less than±1%

3. Specification and Technical Parameters

Input supply voltage (V)	AC220±15%	Frequency (Hz）	50⁄60
Rated duty cycle（%）	60	No-load Voltage（V）	59
Pull arc time（s）	0.1-3	Welding speed （p⁄min）	20-30
Stud diameter (mm)	Φ3-5	Cooling method	Air cooling
Insulation glass	F	Protection Grade	IP21
Weight（kg）	14	Dimension (mm)	450*205*370

4. Main components of welder

1). Panel introduction



5. Operating program

1) Installation

1. Connect the stud welder to the single-phrase power source of 220V/50Hz

2.According to the electric connecting chart, connect the torch and the earth leads.

2) Operation

1.Check all cables if they contact reliably.

2. Turn on the power source switch, push the Charge button.

3. Adjust the knob of‘current adjusting’ clockwise, and you can gain the current you needed show on the LED meter.

5. Press the torch on the pieces intensely and then push the torch trigge

6. Operation rule and Maintain

① The welder covers should be earth and the cutter should be firm emplaced.

② According to the stud, adopt the torch collet.

③ Confirm the collet clamps the stud intensely.

④ Corrective actions

Malfunction	Causation or phenomena	Corrective action
The power indicator no indicate	1.The power sources abnormality 2.The power fuse broken 3.The power indicator broken	Connect Replace Replace
The work indicator no indicate	1.The work indicator broken 2.The charge button broken 3.The AC contactor broken 4.The charge thyristor broken 5.The control board abnormality	Replace Replace Replace Replace Replace
The stud welder cannot work	1.The torch poor contact pieces 2.The torch trigger broken 3.The discharge button broken 4. The control board abnormality 5.The torch cable open circuit	Press intensely Replace Replace Replace Connect

7. Safely rule

1) Welding environment

① Setting arc-shield board on welding table.

② The operator should wear helmet, welding gloves, and working clothing etc.

③ There are not the flammable gases in welding environment.

④ Finger, hair, clothes can't near the air machine.

2) Stud welding machine

① The welder case should be earth while welding.

② The welder can't be put in the environment which contain toxic and flammable gas, and the welder can't be affected with damp and insolation, so it is better put in the place which is ventilated, dry and less dusty.

③ No acid or alkaline , caustic gas and other toxic and flammable gas in the welding environment.

④ The welder should be well maintain at every turn.