

EXTRUSION WELDER

TOP QUALITY

Infinite Zone specializes in supplying comprehensive solutions for geomembrane and HDPE liner installation projects:



IZ-620

WELDING ROD 3-4.5MM

We view every client relationship as a long-term partnership. Your success is our success, which is why we're committed to providing ongoing support long after the initial sale.



CONTACT NOW

www.wedgeweldingmachine.com

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CITY BAY BUSINESS CENTER
ABU HAIL - DEIRA DUBAI

TECHNICAL DATA SHEET

IZ-620

GEOMEMBRANE WELDING MACHINE



Material thickness

- 3MM TO 4.5MM

Colorway



IZ-620

- | | |
|------------------------|------------------------------------|
| • Model | : iZ-620 |
| • Voltage | : 220V/240V |
| • Frequency | : 50/60 Hz |
| • Power | : 1300W |
| • Heating Power | : 3400W/2600W |
| • Hot air temperature | : room temperature -620C |
| • Welding temperature | : 220 ° C -350 ° C (adjustable) |
| • Plug form | : Industrial 16A anti falling plug |
| • Welding rod diameter | : 3.0mm-4.5mm |
| • Extrusion rate | : 1.8-3.6Kg/hour |
| • Welding material | : HDPE/PP |
| • Net weight | : 6.5kg |
| • Warranty | : 1 Year |

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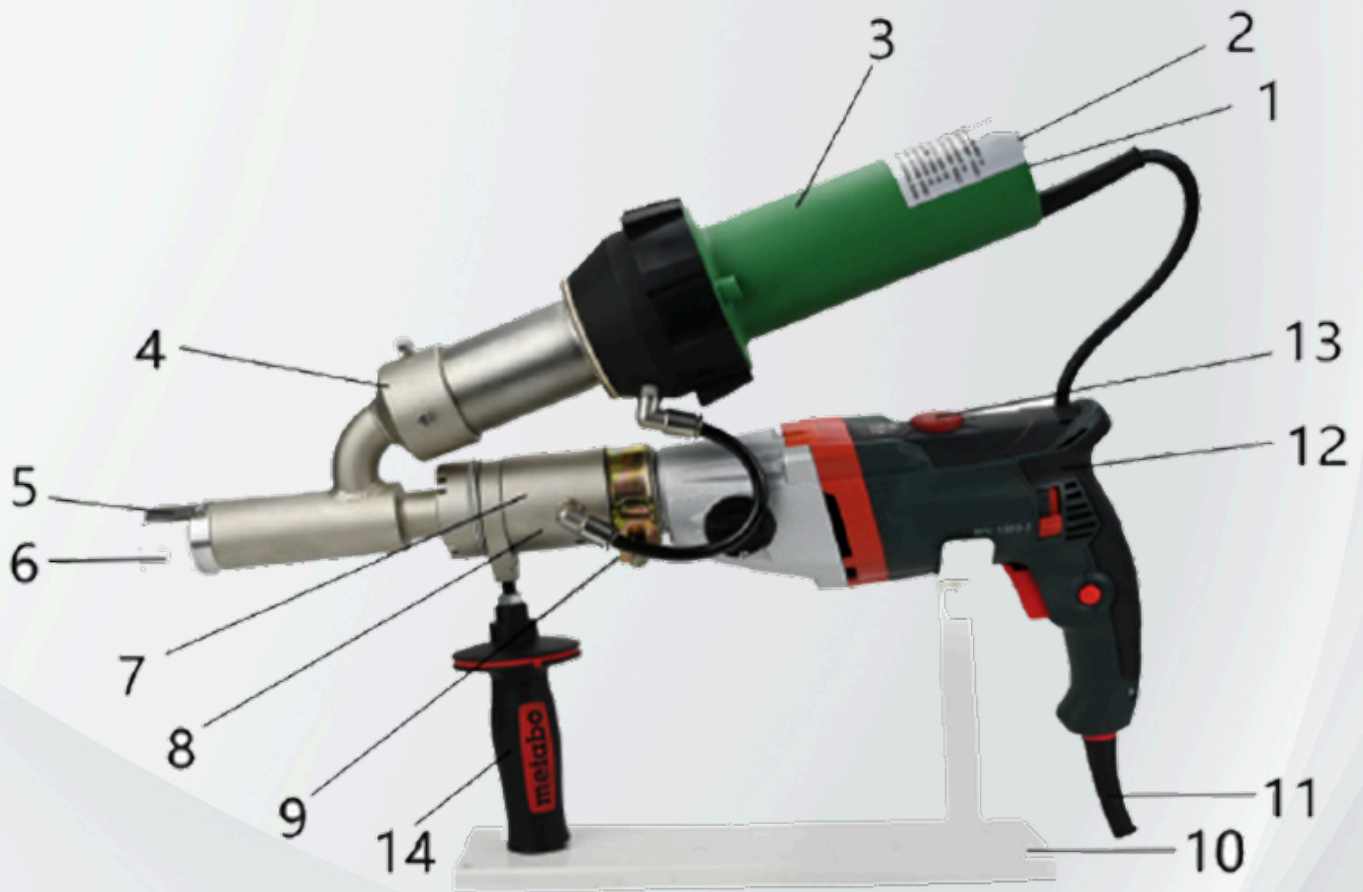
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TECHNICAL DATA SHEET

IZ-620

PARTS & NAMES



1. Hot air switch
2. Temperature adjustment knob
3. Hot air welding gun
4. Y-shaped extrusion gun body
5. Air outlet
6. Welding boots
7. Feed gun body

8. Feed inlet
9. Hoop
10. Placement rack
11. Power cord
12. Drive motor
13. Speed adjustment knob
14. Assist handle

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OPERATION METHOD

1. Choose a suitable power cord and connect it to the iZ-620 industrial anti fall aviation socket of this equipment (it is normal for the drive motor to not rotate at this time)
2. Preparation stage: Insert the main power plug, install the handle, and place the extrusion welding gun on the placement rack.
3. Preheating stage: Turn on the hot air switch of the IZ610 hot air welding gun, adjust the temperature adjustment knob, and set the temperature to the desired temperature value iZ-620. At the same time, turn on the secondary heating to set the temperature above 300 °C.

Please refer to the manual of the temperature controller (it can be adjusted to the highest temperature during preheating, and then adjust to the appropriate temperature during formal operation). Heat and preheat for about 3-5 minutes.

When the old solder at the discharge port of the welding nozzle softens, use a tool to pick out the waste solder that has already begun to soften at the welding nozzle. The length of preheating time needs to be determined on site: if the old solder at the discharge port of the welding nozzle has not softened, it indicates that the preheating time is not enough; If the old solder shows thinning, it indicates that the preheating time is too long.

An appropriate preheating time is very necessary: if the preheating time is insufficient and the extrusion welding gun is forcibly started, it will cause excessive motor load, and in severe cases, it will burn out the motor rotor. If the preheating time is too long, the heat from the air outlet will reverse, causing the motor to overheat and stop, causing the solder to melt before it enters the extrusion chamber, and holding the blade tightly will prevent feeding.

4. Test stage: Turn the motor switch with your right hand and the motor starts to rotate. If there is slight noise in the new machine, it may be related to the resonance between the machine and the placement seat or the tightness of the internal parts of the machine, which does not affect normal operation and use.

If the motor is smooth and the internal sound disappears after feeding, it is normal. But if the motor does not rotate smoothly, shakes violently, and the noise intensifies, it indicates that the preheating time is not enough, and the waste material inside the gun is not melted and cannot be discharged. Need to extend the preheating time.

5. When the motor is confirmed to start, it is best to wait for 2-3 minutes before inserting the welding rod for operation. Carefully adjust the temperature control knob according to the plasticization of the extruded material until the plastic inside the screw is completely softened.

6. Welding stage: When the material is empty, the motor speed is light and fast, and it will become heavier after feeding. If it becomes very difficult, please stop immediately.

It may be because the screw heating time is too short or the temperature is not high enough, or the temperature is too high, which causes the cut solder particles to not fall into the extrusion gun body in time, that is, they have melted and wrapped around the cutting blade, causing blockage. In this case, it is necessary to disassemble the Y-shaped extrusion gun body while it is hot and clean the waste on the cutting blade to ensure that the equipment is normal and not damaged.

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OPERATION METHOD

7. Different welding methods and welding occasions require different welding boots. Our company provides two standard welding boots: a flat welding boot and a right angle welding boot.

8. It is necessary to apply pressure to the extrusion welding gun through the handle, so that the extrusion welding gun can apply pressure to the melted solder and the surface of the plastic to be welded, ensuring their adhesion. Before the formal construction operation, it is necessary to simply empty the material to heat the welding nozzle, making the surface of the weld appear uneven.

9. Welding speed, discharge, angle, and welding nozzle structure will determine the uniformity and aesthetics of the weld seam, but the most important point is that the temperature and air volume of the preheating hot air depend on the strength and welding degree of the weld seam. Generally, the temperature of the hot air is between 260~450 °C. Of course, the faster the welding speed, the higher the temperature required.

10. When the hot air moves with the extrusion welding gun, as long as it can soften the surface of the welded material by the hot air, it can lose its luster. The higher the temperature, the better the welding effect. Excessive temperature may blow or deform the plastic to be welded. Choosing the correct temperature is crucial.

11. When replacing welding boots, please do not knock them forcefully. The best method of replacement is to heat them up before disassembling to prevent old solder from sticking to the welding boots.

12. The lifespan of the carbon brushes for both the hot air gun and the drive motor is about 1600 hours. It is important to replace them in advance and not wait until the carbon brushes are completely worn out to avoid affecting the normal use of the extrusion welding gun.

13. Sorting stage: Before shutting down, it is necessary to completely squeeze out the solder inside the extrusion welding gun to prevent the old solder that can be melted during next use from melting properly, which may cause unsmooth startup and cause equipment malfunctions.

14. Shutdown stage: (BT-620, turn off the secondary heating power switch first) Adjust the scale of the hot air knob to the lowest position, blow cold air for a few minutes before turning off the hot air gun.

15. The old solder at the discharge port of the welding shoe should be cleaned up after the next startup of the welding gun.

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COMMON FAULTS AND TROUBLESHOOTING

IZ-620

Phenomenon description	Possible fault analysis	Troubleshooting
No hot air coming out	The hot air gun motor does not rotate	Replace the hot air gun motor
	The heating gun core is not heated	Replace the heating gun core and replace the circuit board
	The air outlet on the upper side of the outlet is blocked	Remove debris from the air outlet
Noise and shaking during discharge	The discharge port is blocked by foreign objects	After preheating for a sufficient amount of time, clean the discharge port
	Extrusion screw or blade wear	Replace the extrusion screw or blade
	The electrode particles are stuck in the blade and the feed screw drive is in the lowest gear	Remove the connecting screws between the feed chamber and the extrusion chamber, clean the welding rod particles, and adjust the drive motor to gear 1
Drive motor not rotating	Carbon brushes wear out after exceeding their service life	Replacing carbon brushes
	Overvoltage causes motor burnout	Replace the drive motor
	Loose motor wiring	Rewire
No feed	Welding rod not inserted deep enough	Reinsert the welding rod
	Welding rod cannot be inserted into the feed hole	4mm welding rod can only be inserted into the upper feed hole (4.5mm hole)
	Residual welding rods blocking the feed channel	Remove the connecting screws between the feed chamber and the extrusion chamber, and clean the welding rod particles
	Wear of feed screw	Replacing the feed screw
The indicator light on the back of the BT-610 and 620 drive motors lights up and forces the machine to stop	Continuous working time too long, motor overheating	Stop the machine and rest for fifteen minutes, then restart work after the motor cools down
	Blocked air outlet, hot air recirculation	Clean foreign objects from the air outlet
	Insufficient melting temperature and high motor resistance	Appropriately increase the hot air temperature and reduce the motor resistance
	The secondary heating temperature is lower than the set value	Repair the secondary heating system or reset it
The temperature controller screen is flashing	Secondary heating system malfunction	Check the circuit or replace the accessories

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QUALITY ASSURANCE

The warranty period for our company's products (motors, circuit boards) is one year from the date of sale to consumers. Our company will be responsible for faults caused by material or manufacturing defects. We will make our own decision to repair or replace defective components to meet warranty requirements.

The warranty does not include vulnerable parts (such as hot wedges, bearings, chains, rollers, appearance parts, etc.); Excluding defects or damages caused by improper handling or maintenance; It also does not include abnormal use and unauthorized modification; Damage caused by falling or being crushed is not covered by the warranty!



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