



Plastic Extrusion Welding Gun

This plastic extrusion welding gun is the first in China to provide bipolar independent heating of the base metal and welding rod, digital temperature control display, 360-degree rotatable welding tip, and motor cold start protection. It uses a Japanese Hikoki electric drill as the extrusion motor. It has a compact body, easy operation, stable performance and can be continuously welded. It is suitable for welding PE, PP, PVDF and other hot-melt plastics. The plastic extrusion welding gun include three series products: Dual heated extrusion welding machine, single heating extrusion welding machine and particle extrusion welding machine.

★LST600A/600B/600C LST610A/610B/610C Dual heated extrusion welding machine



LST600A



LST600B



LST600C



LST610A



LST610B



LST610C

★LST600E/600F/610E Single heating extrusion welding machine



LST600E



LST600F



LST610E

Welding Machine Products: Plastic Extrusion Welding Gun

★LST620 Particle extrusion welding machine



Dual independent heating



Digital temperature control display



Particle feed



Cold start protection

SPECIFICATIONS OF PLASTIC EXTRUSION WELDING GUN

1-1. Dual heated extrusion welding machine LST600A /600B/600C

Dual heated extrusion welding machine			
Item	LST600A	LST600B	LST600C
Input Voltage	230w	230w	230w
Extrusion motor power	800 W	800 W	800 W
Hot air power	1600 W	3400 W	1600W
Welding rod heating power	800 W	800 W	800 W
Hot air temperature	20-620°C	20-620°C	20-620°C
plastic extrusion temperature	50-380°C	50-380°C	50-380°C
Extrusion volume	2.0-2.5 Kg/h	2.0-2.5 Kg/h	2.0-2.5 Kg/h
Welding rod diameter	3.0-4.0 mm	3.0-4.0mm	43.0-4.0mm
Total Weight	6.9Kg	6.9 Kg	6.9 Kg
Motor	HIKOKI	HIKOKI	HIKOKI
Digital display function	extrusion temperature	extrusion temperature	extrusion temperature
Fault indication	Code warning	Code warning	Code warning
Certification	CE	CE	CE
Guarranty	1 year	1 year	1 year

SPECIFICATIONS OF PLASTIC EXTRUSION WELDING GUN
1-2.Dual heated extrusion welding machine LST610A/610B/610C

Dual heated extrusion welding machine			
Item	LST610A	LST610B	LST610C
Input Voltage	230V	230 V	230V
Frequency	50/60 Hz	50/60 Hz	50160Hz
Extrusion motor power	1300 W	1300 W	1300 W
Hot air power	1600W	3400 W	1600 W
Welding rod heating power	800 W	800 W	800 W
Hot air temperature	20-620°C	20-620°C	20-620°C
plastic extrusion temperature	50-380°C	50-380°C	50-380°C
Extrusion volume	2.0-3.0 Kg/h	2.0-3.0 Kg/h	2.0-3.0 Kg/h
Welding rod diameter	3.0-4.0 mm	3.0-4.0mm	43.0-4.0mm
Total Weight	7.2 Kg	7.2 Kg	7.2 Kg
Motor	METABO	METABO	METABO
Digital display function	extrusion temperature	extrusion temperature	extrusion temperature
Fault indication	Code warning	Code warning	Code warning
Certification	CE	CE	CE
Guarranty	1 year	1 year	1 year

SPECIFICATIONS OF PLASTIC EXTRUSION WELDING GUN
2.Single heating extrusion welding machine LST600E/600F/610E

Single heating extrusion welding machine			
Item	LST600E	LST600F	LST610E
Input Voltage	230 V	230 V	230V
Frequency	50/60 Hz	50160 Hz	50/60 Hz
Extrusion motor power	800 W	1200 W	1300 W
Hot air power	3400 W	3400 W	3400 W
Hot air temperature	20-620°C	20-620°C	20-620°C
plastic extrusion temperature	50-380°C	50-380°C	50-380°C
Extrusion volume	2.0-2.5 Kg/h	2.5-3.0 Kg/h	2.5-3.0 Kg/h
Welding rod diameter	A3.0-4.0 mm	a3.0-4.0mm	03.0-4.0mm
Total Weight	6.0 Kg	7.5 Kg	6.3 Kg
Motor	HIKOKI	FEJI	METABO
Certification	CE	CE	CE

SPECIFICATIONS OF PLASTIC EXTRUSION WELDING GUN

3. Particle extrusion welding machine LST620

Input Voltage	230V
Extrusion motor power	1300 W
Hot air power	1600 W
Particle heating power	800 W
Wind temperature	20-620°C
plastic extrusion temperature	50-380°C
Extrusion volume	2.0-3.5kg/h
Total Weight	8.0 Kg
Motor	METABO
Certification	CE

PLASTIC EXTRUSION WELDING GUN OPERATION STEPS:

- ◆ Preheating: Turn on the welding gun, adjust the temperature knob to low temperature, and wait for the equipment to preheat.
- ◆ Temperature Adjustment: Gradually adjust the temperature to the appropriate welding temperature based on the type and thickness of the welding material (usually between 200-300 degrees Celsius for materials like HDPE, PP, PVDF, etc.).
- ◆ Welding: Align the welding gun with the area to be welded, ensuring even heating of the weld seam. Simultaneously, feed the welding rod into the feeding hole through the feeder.
- ◆ Extrusion Welding: Re-plasticize the solder in a single screw extruder, forcibly extrude it, and fill it onto the surface of the preheated welding material for welding.
- ◆ Weld Seam Treatment: Ensure the molten solder fully integrates with the base metal being welded and mold it according to the shape of the welding nozzle for optimal mechanical strength of the weld seam.

Matters Needing Attention:

- ◆ Operation Safety: Avoid touching the gun barrel with your hands during operation to prevent burns.
- ◆ Temperature Control: Pay attention to temperature adjustment throughout the welding process to avoid material burning or deformation due to excessive temperature.
- ◆ Shutdown Cooling: After welding is completed, adjust the temperature knob to the lowest position and blow air for a few more minutes. Allow the equipment to cool naturally before shutting it down to prevent component damage from waste heat.

◆ Equipment Maintenance: Regularly clean the equipment and inspect the feeder and extrusion mechanism to ensure smooth operation.

◆ Environmental Safety: Ensure on-site ventilation during use to prevent the accumulation of harmful gases and smoke.

Fault Handling:

◆ Equipment Malfunction: If the equipment malfunctions, stop immediately and seek assistance from professional technical personnel. Do not attempt to disassemble or repair it on your own.

◆ Welding Problem: If the weld seam is not firm or has defects, analyze the cause, adjust welding parameters or methods, and perform repair welding or re-welding if necessary.



APPLICATION SCENARIOS OF PLASTIC EXTRUSION WELDING GUN



Production, splicing and repair of environmental protection equipment, anti-corrosion equipment, electroplating equipment, acid and alkali resistant equipment, carriage linings, plastic water tanks, plastic pipes, plastic containers, plastic sheets, plastic film materials and other fields.

In summary, the geomembrane extrusion welding gun is an efficient and reliable welding tool suitable for welding and repairing various thermoplastic materials, especially in geomembrane construction. It can play its unique advantages to ensure welding quality and engineering service life.

