



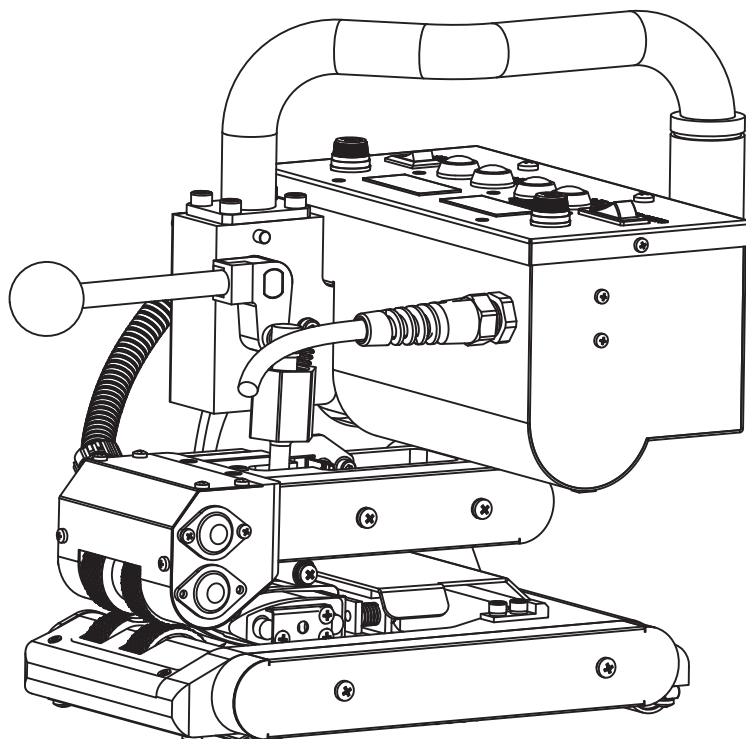
Lesite Technology

LST-GM1

Geo Hot Wedge Welder

Manual

V1.0





Please read this manual carefully before using this machine, and keep it for future reference.

This machine adopts an advanced hot wedge structure, which has better heating efficiency and faster welding speed. It is specially designed for welding 0.2mm-2.0mm HDPE, LDPE, PP, TPO, PVC geomembranes.

Application

- Solid Waste Landfills
- Sewage Treatment
- Anti-Seepage Project
- Chemical Mining
- Water Conservancy
- Aquaculture



Precautions



Unplug the welder before disassembling it to avoid injury from exposed wires or component inside the machine with power.



Incorrect operation may cause fire and explosion hazard because of high temperature, especially near combustible materials or explosive gases.



Don't touch the hot wedge (during welding or before the welding machine has completely cooled down) to avoid burns.



The power supply voltage must match the rated voltage marked on the welding machine and be reliably grounded. Connect the welding machine to a socket with a protective ground conductor.



To ensure operator safety and reliable operation of equipment, the power supply must be equipped with a voltage stabilizer and a residual current device.



The welding machine must be operated under the correct control of the operator, otherwise it may cause combustion or explosion due to high temperature.

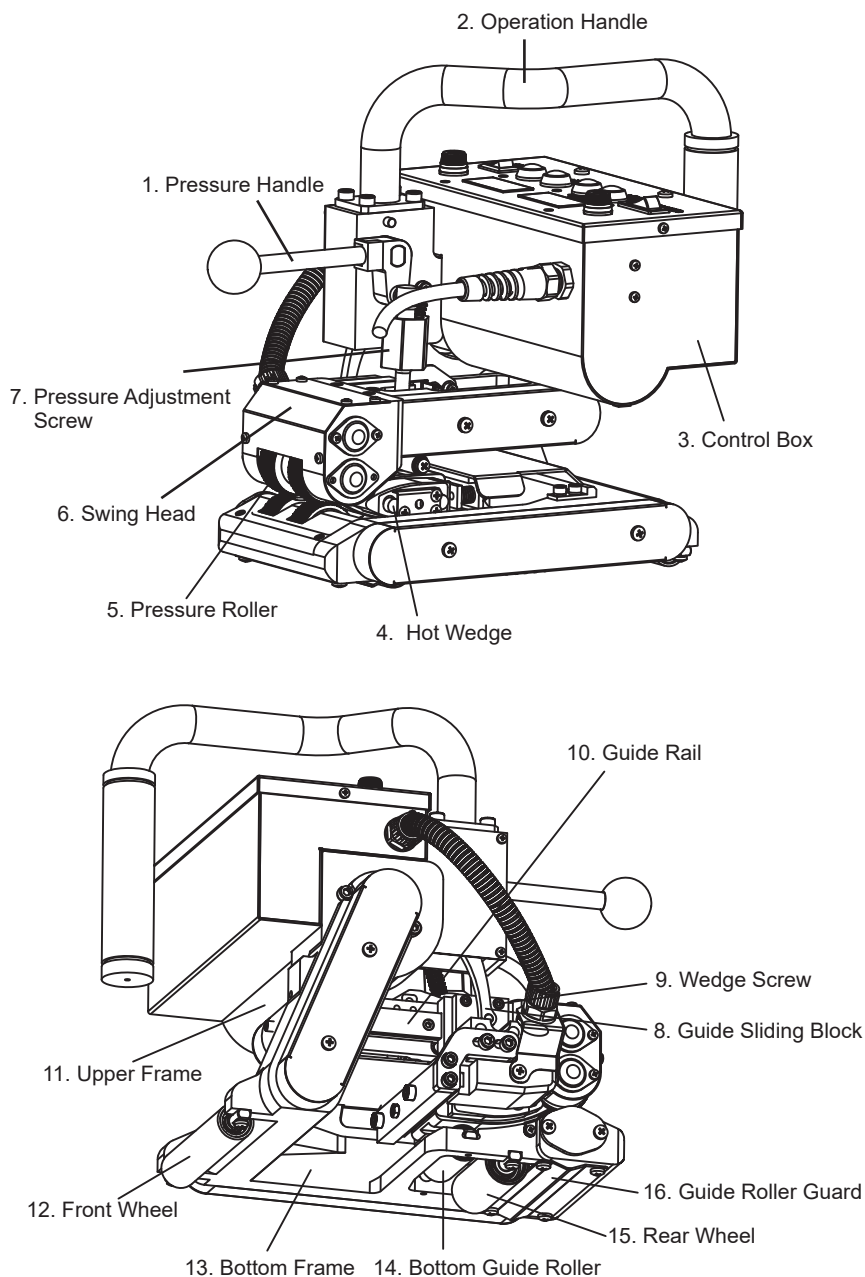


It is strictly forbidden to use the welding machine in water or muddy ground, avoid soaking, rain or damp.

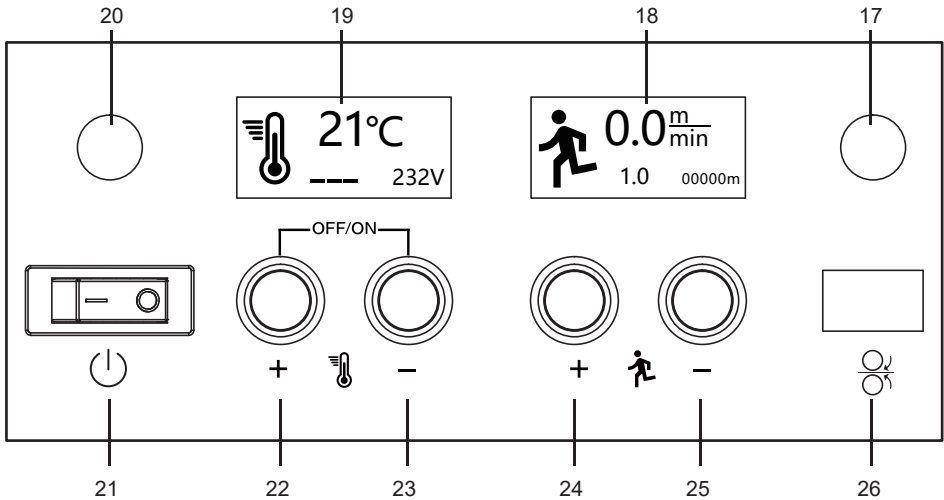
Parameter

Model	LST-GM1
Rated Voltage	230 / 120 V
Frequency	50 / 60 Hz
Rated Power	1400 W
Heating Temperature	60 - 450 °C
Welding Speed	0.6 - 6.0 m/min
Welding Pressure	100 - 1000 N
Material Thickness Welded	0.3 - 2.0 mm (Single Layer)
Seam Width	15mm×2, Interior Cavity 15 mm
Overlap Width	12 cm
Seam Strength	≥85% Material
Net Weight	9.7 Kg
Size	325 × 265 × 285 mm
Membrane Laying Ways	Membrane laying way by one edge against the other edge
Digital Display	Temperature & Speed Display
Certificate	CE
Warranty	One Year

Main Parts



Control Panel



17. Motor Fuse

18. Speed Display

19. Temperature Display

20. Power Fuse

21. Power Switch

22. Temperature Setting Knob (+)

23. Temperature Setting Knob (-)

24. Speed Setting Knob (+)

25. Speed Setting Knob (-)

26. Motor Switch

1. Welding temperature:

Press the buttons **+**  **-** on the panel to set the required welding temperature, which depends on the welding material and ambient temperature. The LCD screen will display the preset temperature and the current actual temperature.

2. Welding speed:

Press the buttons **+**  **-** on the panel to set the required welding speed, which matches the welding temperature. The LCD screen will display the preset speed and the current actual speed.

3. Motor is on:

Press the buttons  above to start the motor.

- This machine features parameter memory function. The previous settings will be restored automatically upon next power-on without the need for resetting.

Operating Procedure

1. Connect the power supply, lift up the pressure handle (1) and the pressure roller (5) will separate automatically.
2. Turn on the power switch (21), the LCD screen displays (as shown in Fig 1)while the hot wedge has not started to heat up.



Fig 1

3. Press the Temperature Setting Knob (+) (22) . The LCD screen displays (as shown in Fig 2) while the hot wedge starts to heat until the actual temperature is equal to the preset temperature.



Fig 2

4. Turn on the motor switch (26), and turn the speed buttons (24) (25) to set the required welding speed (as shown in Fig 3) , then insert the membrane layers.



Fig 3

5. Put down the pressure handle (1) , the machine starts to move and weld.
6. Keep observing the welding trail and the position of the upper layer and lower layer at any time to adjust in case of deviation.
7. After welding, lift up the pressure handle (1). The pressure roller (5) and hot wedge (4) will disengage. Move the machine away from the welding position.
8. Turn off the motor switch (26), press the +  - at the same time (as shown in Fig 4), or turn the temprature down button, the hot wedge will stop heating.



Fig 4

9. Turn off the power switch.

Fault & Solutions

Fault	Causes	Solutions
Screen is dark/off	Power failure or low voltage	Check the voltage and power wire
	Power fuse has blown	Replace fuse 15A
	Power switch doesn't work	Replace the power switch
Motor doesn't rotate	Motor fuse has blown	Replace fuse 1A
	Power switch doesn't work	Replace the power switch
	Motor doesn't work	Replace the motor
	Drive board fuse has blown	Replace the drive board fuse
	Drive board doesn't work	Replace the drive board
Speed knob can't be adjusted or the motor moves at a abnormal speed	Speed knob doesn't work	Replace the speed knob
	Sensor fails to detect date	Replace the photo sensor board and sensor wire
	Drive board doesn't work	Replace the drive board
Hot wedge doesn't heat	Heating tubes do not work	Replace the heating tubes
	Hot wedge doesn't work	Replace the hot wedge
	Drive board doesn't work	Replace the drive board
Hot wedge burned	Thermocouple failure	Replace the thermocouple
	Drive board doesn't work	Replace the drive board
	Wires "+" and "-" of thermocouple were connected wrongly	Connect correctly
Shows on display "thermocouple ERR"	No thermocouple	Check whether the thermocouple wire in the display board is off or not
	Thermocouple burned	Replace the thermocouple
Shows on display "CT:016°C ST: Pause"	Stop heating	Press two buttons at the same time so that it heats
Shows on display: Mosaicgarbled	Display screen or board doesn't work	Change the display screen or board

Fault Codes

Fault	Causes	Solutions
	Thermocouple fault	1. Check wiring; 2. Replace thermocouple; 3. Replace wedge assy.
	Heating element fault	1. Check wiring; 2. Replace heating tubes; 3. Replace wedge assy.
 179V	Voltage below 180V Alarm (230V)	Raise voltage
 89V	Voltage below 90V Alarm (120V)	Raise voltage
 251V	Voltage above 250V Alarm (230V)	Reduce voltage
 131V	Voltage above 130V Alarm (120V)	Reduce voltage
 --- 281V	Voltage reaching 280V Alarm (230V)	Cut off the power, reduce voltage
 --- 161V	Voltage reaching 160V Alarm (120V)	Cut off the power, reduce voltage

Nameplate

The model identification and serial number are marked on the nameplate of your machine.

Please provide these data when consulting Lesite Sales and Service Center.



GEO HOT WEDGE WELDER

Model: LST-GM1

Welding Thicknes: 0.3-2.0mm

Speed: 0.6-6.0m/min

Overlap Width: 12cm

Welding Seam: 15mm*2

Voltage: 230V/50Hz

Power: 1400W

Temp.: 60-450°C

Weight: 9.7Kg

SN: See Machine Frame

Fuzhou Lesite Plastics Welding Technology Co., LTD

www.lesiteweld.com

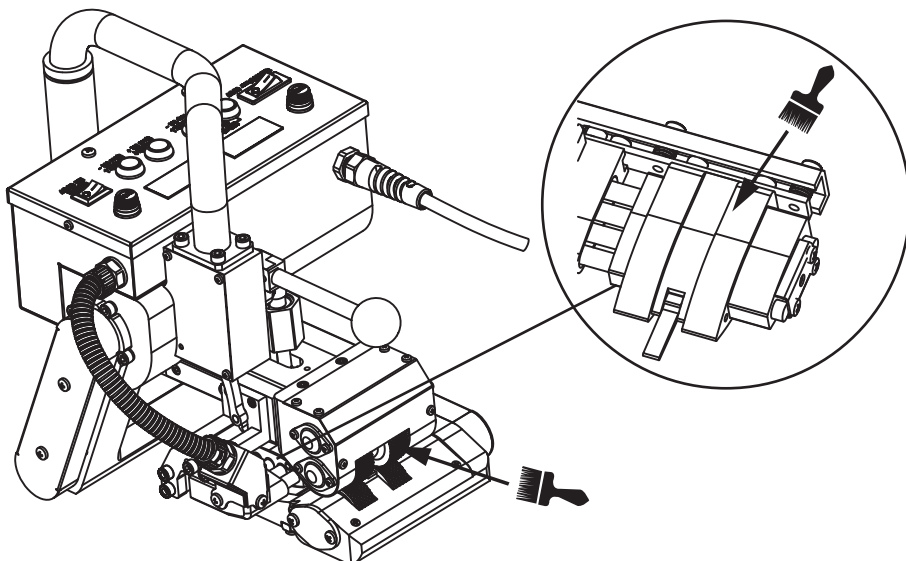
info@lesite.com.cn

Standards: Q/350100LST 001



Daily Maintenance

Clean the hot wedge and pressure rollers after welding.



Quality Assurance

- This product guarantees a one year warranty from the day it is sold to consumers. We will be responsible for failures caused by material or manufacturing defects. We will repair or replace defective parts at our sole discretion to meet the warranty requirements.
- The quality assurance does not cover damage to wearing parts (heating elements, carbon brushes, bearings, etc.), damage or defects caused by improper handling or maintenance, and damage caused by falling products. Irregular use and unauthorized modification should not be covered by the warranty.

Standards

The company declares that the products manufactured and marketed by the company meet the requirements of the following enterprise implementation standards.

Standards: Q/350100LST 001.

Repairs and Spare Parts

- It is strongly recommended to send the product to Lesite company or authorized repair center for professional inspection and repair.
- Only original Lesite spare parts are allowed.





FUZHOU LESITE PLASTICS WELDING TECHNOLOGY CO.,LTD



Tel: +86(591)83818890



E-mail: info@lesite.com.cn

Web: www.lesiteweld.com



Add: 5# Jingpu Road, Pushang Industry Park,
Cangshan, Fuzhou, 350007, Fujian, China