

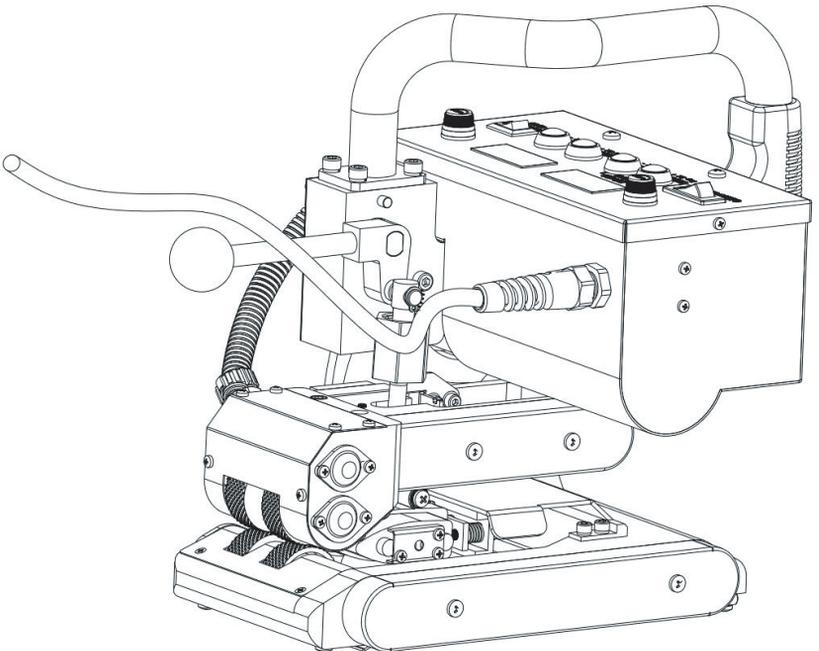


Lesite Technology

# LST-GM1

Geo Hot Wedge Welder

Manual





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 for welding 0.2mm-2.0mm HDPE, LDPE, PP, TPO, PVC

## Application

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



## Precautions



Please confirm that the machine is turned off and unplugged before disassembling the welding machine, so as not to be injured by live wires or components inside the machine.



The welding machine generates high temperature and high heat, which may cause fire or explosion when used incorrectly, especially when it is close to combustible materials or explosive gas.



Please do not touch the hot wedge (during welding or when the welding machine has not completely cooled down) so as not to burn.



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.



In order to ensure the safety of the operators and the reliable operation of the equipment, the power supply at the construction site must be equipped with a regulated power supply and a leakage protector.



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

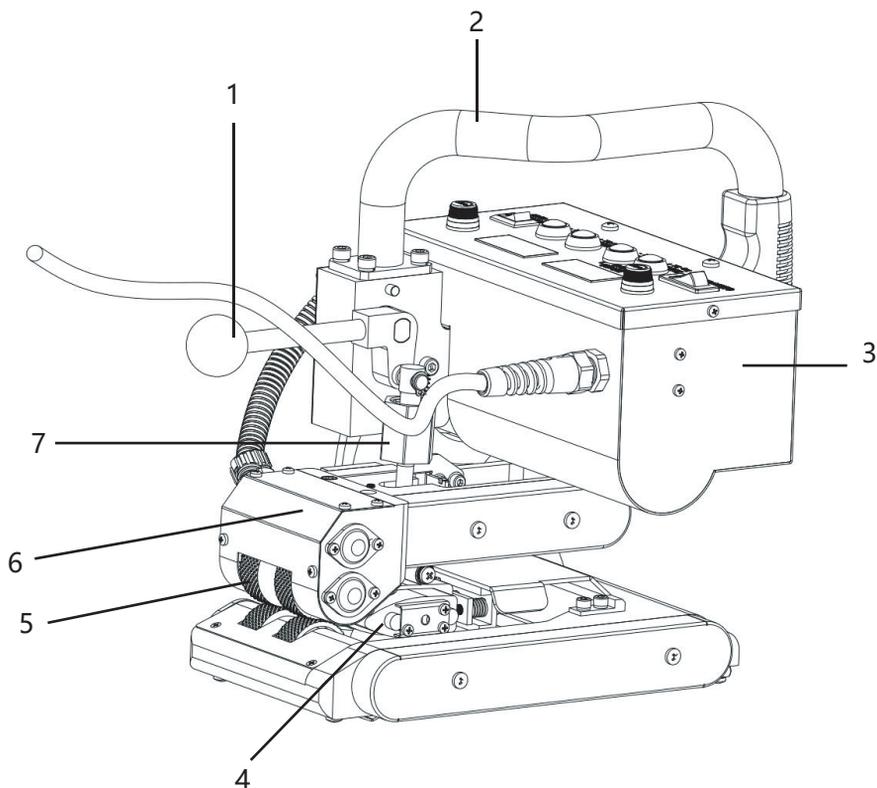


It is strictly forbidden to use the welding machine in water or muddy ground, avoid soaking, rain or damp.

## Parameter

Model	<b>LST-GM1</b>
Rated Voltage	230 / 120 V
Frequency	50 / 60 Hz
Rated Power	1400 W
Welding Speed	0.5 - 6.0 m/min
Heating Temperature	50 - 450 °C
Welding Pressure	100-1000 N
Material Thickness Welded	0.2 mm - 2.0 mm
Overlap Width	12 cm
Seam Width	15 mm *2 cavity 15 mm
Seam Strength	≥ 85 % Material
Net Weight	9.0 Kg
Film Feeding Method	Bidirectional Film Feed
Digital Display	Temp. & Speed Display
Certificate	CE
Warranty	One Year

## Main Parts



1、 Pressure Handle

2、 Operation Handle

3、 Control Box

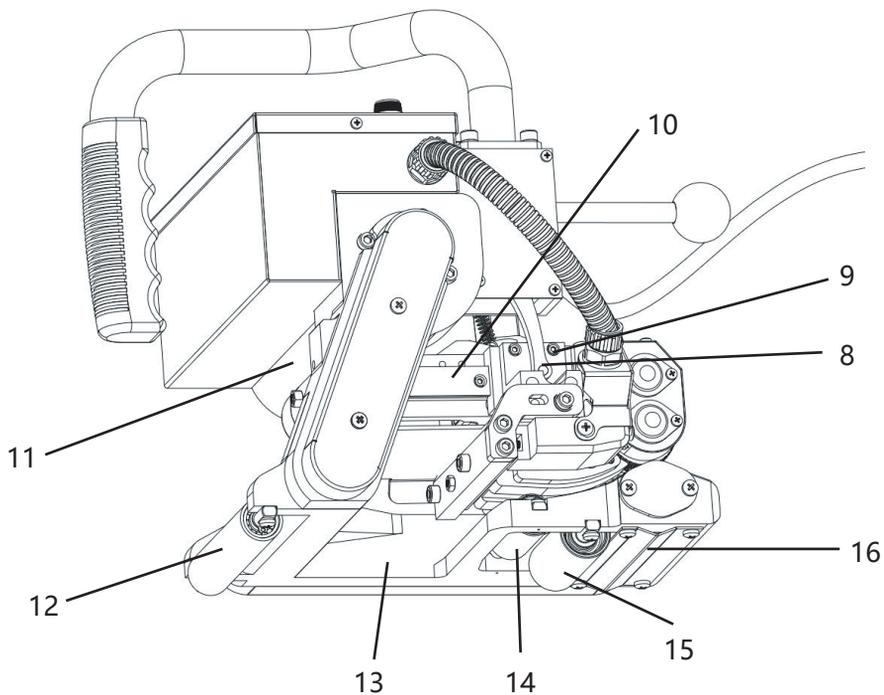
4、 Hot Wedge

5、 Pressure Roller

6、 Swing Head

7、 Pressure Adjustment Screw

## Main Parts



8、 Guide Sliding Block

9、 Wedge Screw

10、 Guide Rail

11、 Upper Frame

12、 Front Wheel

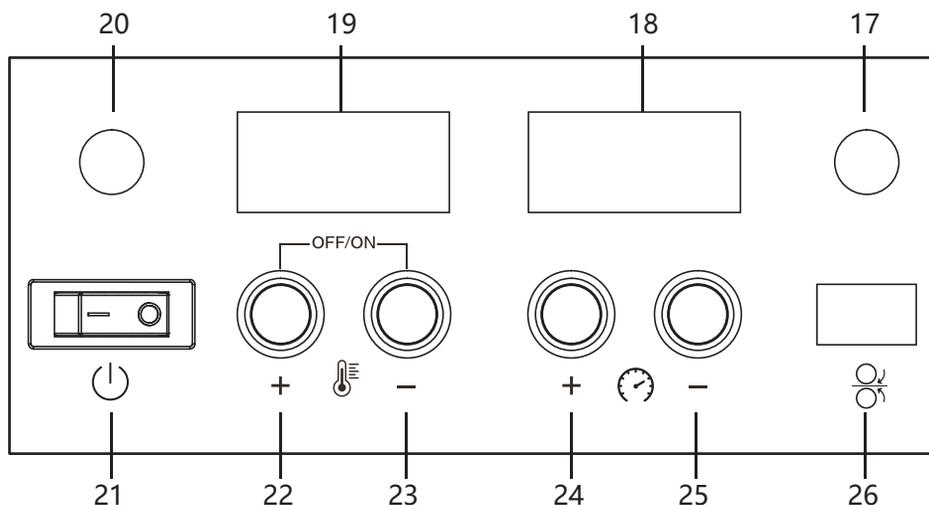
13、 Bottom Frame

14、 Bottom Guide Roller

15、 Rear Wheel

16、 Guide Roller Guard

## LST-GM1 Control Panel



17、Motor Fuse

19、Temperature Display

21、Power Switch

23、Temperature Drop Knob

25、Speed Down Knob

18、Speed Display

20、Power Fuse

22、Temperature Rise Knob

24、Speed Increase 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 motor moves.

- This machine has a parameter storage memory function that the welding machine will automatically show the last parameters without resetting the parameters when the machine is turned on next time.

## LST-GM1 Operation Steps



Fig 1

- 1、 Connect the power supply, lift up the pressure handle (1) and the pressure roller (5) to 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 2

- 3、 Turn on the temperature rise knob (22) so 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 3

- 4、 Turn on the motor switch (26), and turn the speed knobs (24) (25) to set the required welding speed (as shown in Fig 3) , then insert the membrane layers.
- 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 finishing welding, lift up the pressure handle (1),move the machine away from the welding position.



Fig 4

- 8、 Turn off the motor switch (26) , press the temperature rise knob (22) and the temperature drop knob at the same time (23) (As shown in Fig 4), or turn the temperature drop knob to "OFF" , the hot wedge will stop heating.
- 9、 Turn off the power switch.

## Fault & Solutions

Fault	Causes	Solutions
Screen shows nothing	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 move	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 can't detect the data	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

## Fault & Solutions

Fault	Causes	Solutions
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

## LST-GM1 Nameplate

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

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



### GEO HOT WEDGE WELDER

Model: LST-GM1	Voltage: 230V 50/60Hz
Welding Thickness: 0.2-2.0mm	Power: 1400W
Speed: 0.5-6.0m/min	Temp.: 50-450°C
Overlap Width: 12cm	Weight: 9.0Kg
Welding Seam: 15mm*2	SN: see machine frame

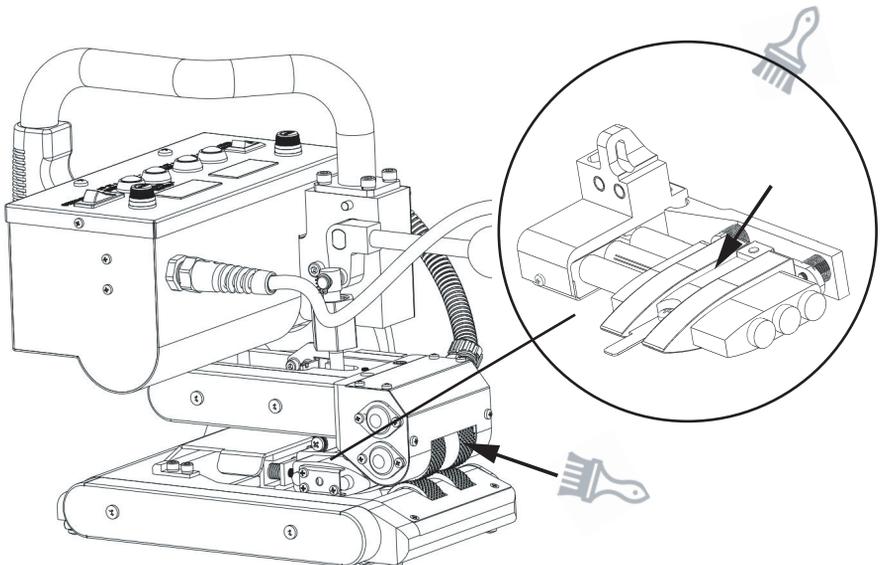
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Standards: Q/350100LST 001



## Maintenance

Do clean the hot wedge and pressure rollers after welding.



## Quality Assurance

This product guarantees a 12-month shelf life 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.

## Maintenance

- 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.





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