

# Hot Melt Troubleshooting Guide: Common Issues and What to Check First

## Technical Troubleshooting

While troubles with your hot melt equipment can often be diagnosed in a few simple steps, it's important to consult the correct resources to ensure you're taking appropriate steps. Follow your facility's safety protocol and the melter manual safety instructions before troubleshooting glue melter issues.

Below are generic troubleshooting suggestions for issues with glue melter equipment. Keystone Industries is not liable for any worn or damaged parts from disassembly or any injuries resulting from work performed on a glue melter or parent machine. Please refer to your melter's specific user manual for detailed maintenance instructions.

**WARNING: Allow only qualified personnel to perform troubleshooting on the glue melters. Observe and follow all safety instructions.**

### Hot Melt Troubleshooting: Mechanical Issues

Mechanical troubles are among the most common causes of loss of productivity in glue melter applications. Following are commonly found issues along with step-by-step troubleshooting instructions.

#### *Hot Melt Piston Pump Not Pumping*

If you find a hot melt pump not working:

1. Verify if the melter tank is at operating temperature
2. Check for melter fault lights
3. Check the pump air supply
4. Inspect the pump pressure discharge valve
5. Check the shifter valve assembly

#### *Piston Pump is Pumping Erratically*

To identify hot melt piston pump inconsistent operation:

1. Verify the adhesive level isn't too low
2. Confirm the adhesive is fully melted
3. Check to see if pump seats are clear of debris

4. Verify the o-ring on the crossover tube is not broken
5. Inspect the pressure relief valve
6. Check the pump pressure discharge valve

#### *Hot Melt Gear Pump Not Working*

A gear pump not pumping can be related to a motor not running. In order to troubleshoot:

1. Check the melter for fault lights
2. Verify if the pump ready light is ON
3. Check for blown fuses on circuitry
4. Confirm the power switch is ON
5. Check the motor capacitor
6. Check motor control

#### *No Glue Pumping From a Hot Melt Machine*

If a pump motor is running with no adhesive pumping from the melter:

1. Verify the adhesive level is not too low
2. Check if the adhesive is melted
3. Ensure nozzles are clear of debris and clogs
4. Verify the tank filter is clear of debris
5. Verify inline filters are clear of debris
6. Check the coupler between the pump and motor
7. Confirm the o-ring on the crossover tube is not broken
8. Inspect the pressure regulator
9. Check the pressure relief valve
10. Verify operating temperature on circuitry

#### *Poor Hot Melt Adhesive Flow*

Begin hot melt adhesive flow troubleshooting steps to:

1. Verify the pump ready light in ON
2. Confirm the pump is functioning
3. Check the air pressure to piston pump
4. Check speed settings on gear pumps
5. Confirm operating temperatures are correct
6. Verify tank filters are clear of debris

7. Ensure the inline filters are clear of debris
8. Verify nozzles are clear of debris and clogs

## **Hot Melt Troubleshooting: Electrical Issues**

Electrical issues relating to the heating of the tank, hose and other glue melter components can negatively impact productivity. Use these tips to troubleshoot the following primary electrical concerns.

### *Hot Melt Tank Not Getting Hot*

When you find a hot melt tank not heating properly:

1. Check the melter for fault lights
2. Check for blown fuses on circuitry
3. Verify resistance on the tank heater
4. Verify resistance on the tank RTD sensor
5. Check the triac on the circuitry
6. Check the overtemp thermostat
7. Inspect the wiring to ensure the tank heater is not broken, loose or burnt
8. Verify control boards are functioning

### *Hot Melt Hose Not Heating*

To troubleshoot a hose not heating properly:

1. Check the melter for fault lights
2. Confirm there are no blown fuses on circuitry
3. Verify resistance of the hose heater
4. Check resistance of the hose RTD sensor
5. Look for loose electrical connections at applicator and tank ends
6. Inspect for broken, bent, loose or missing electrical pins
7. Verify control boards are functioning

### *Hot Melt Applicator Not Getting Hot*

If you have a hot melt applicator not heating properly:

1. Check the melter for fault lights
2. Inspect for blown fuses on circuitry
3. Check resistance on the head heater
4. Check resistance on the head RTD sensor
5. Verify the electrical connection to the hose is secure

6. Check for broken, bent, loose or missing electrical pins
7. Make sure control boards are functioning

#### *Hot Melt Tank Overheating*

To troubleshoot a hot melt tank getting too hot:

1. Check the melter for fault lights
2. Verify resistance on the tank RTD sensor
3. Confirm control boards are functioning

#### *Hot Melt Hose Is Overheating*

If a hot melt hose is getting too hot:

1. Check the melter for fault lights
2. Verify resistance on the hose RTD sensor
3. Confirm control boards are functioning

#### *Hot Melt Applicator Getting Too Hot*

To confirm a hot melt applicator overheating:

1. Check the melter for fault lights
2. Verify resistance of the head RTD sensor
3. Confirm control boards are functioning

### **Hot Melt Troubleshooting: Adhesive Issues**

Trouble with adhesives is a basic problem that can cause pervasive issues if not promptly diagnosed and dealt with. Use the following instructions to troubleshoot common adhesive issues.

#### *Poor Hot Melt Adhesion*

If you have hot melt glue not sticking:

1. Confirm the temperature setting
2. Check for poor compression
3. Verify appropriate adhesive levels
4. Check for difficult or coated substrate

#### *Hot Melt Glue Is Stringy*

In the event hot melt adhesive is stringing:

1. Check the temperature setting
2. Confirm the correct pressure level
3. Ensure the nozzle is positioned close enough to the substrate
4. Inspect the spool valve for blockage or damage
5. Check the machine timing and alignment

### *Hot Melt Glue is Smoking*

If you see hot melt adhesive is smoking:

1. Confirm the correct adhesive temperature
2. Check temperature inside of the pot
3. Check for excessive air exposure
4. Check melter stability

### **Contact Keystone Industries for Additional Information**

If you're having trouble with your hot melters, get in touch with us today by email, LiveChat or telephone. We'll be happy to answer all your questions and provide a quote on the reliable hot melt aftermarket equipment and parts you're searching for.