

Hose Heat System



Before performing any troubleshooting procedures:

1. Relieve pressure, page 27.

2. Turn main power OFF



3. Allow equipment to cool.

Problems

Try the recommended solutions in the order given for each problem, to avoid unnecessary repairs. Also, determine that all circuit breakers, switches, and controls are properly set and wiring is correct before assuming there is a problem.

PROBLEM	CAUSE	SOLUTION
Hose heats but heats slower than usual or it does not reach temperature.	Ambient temperature is too cold.	Use auxiliary hose heat system.
	FTS failed or not installed correctly.	Check FTS, page 10.
	Low supply voltage.	Verify line voltage. Low line voltage significantly reduces power available to hose heat system, affecting longer hose lengths.
Hose does not maintain temperature while spraying.	A and B setpoints too low.	Increase A and B setpoints. Hose is designed to maintain temperature, not to increase it.
	Ambient temperature is too cold.	Increase A and B setpoints to increase fluid temperature and keep it steady.
	Flow too high.	Use smaller mix chamber. Decrease pressure.
	Hose was not fully preheated.	Wait for hose to heat to correct temperature before spraying.
	Low supply voltage.	Verify line voltage. Low line voltage significantly reduces power available to hose heat system, affecting longer hose lengths.
Hose temperature exceeds setpoint.	A and/or B heaters are overheating material.	Check primary heaters for either a thermocouple problem or a failed element attached to thermocouple, page 10.
	Faulty thermocouple connections.	Verify that all FTS connections are snug and that pins of connectors are clean. Examine connection of thermocouples to long green plug on heater control board. Unplug and re-plug thermocouple wires, cleaning off any debris. Unplug and re-plug long green connector on heater control board.
	Missing or damaged insulation around FTS, causing the hose heat to be ON constantly.	Make sure the hose bundle has adequate insulation evenly covering the entire length and connection joints.

Hydraulic Reactors -Troubleshooting - Hose Heat

Troubleshooting

PROBLEM	CAUSE	SOLUTION
Erratic hose temperature.	Faulty thermocouple connections.	Verify that all FTS connections are snug and that pins of connectors are clean. Examine connection of thermocouples to long green plug on heater control board. Unplug and re-plug thermocouple wires, cleaning off any debris. Unplug and re-plug long green connector.
	FTS not installed correctly.	FTS should be installed close to end of hose in same environment as gun. Verify FTS installation, page 40.
	Missing or damaged insulation around FTS, causing the hose heat to be ON constantly.	Make sure the hose bundle has adequate insulation evenly covering the entire length and connection joints.
Hose does not heat.	FTS failed or is not contacting correctly.	Check FTS, page 40.
	FTS not installed correctly.	FTS should be installed close to end of hose in same environment as gun. Verify FTS installation, page 40.
	Temperature control alarm.	Check temperature display or diagnostic code, page 40.
Hoses near Reactor are warm, but hoses downstream are cold.	Shorted connection or failed hose heating element.	With hose heat on and temperature setpoint above displayed hose zone temperature, verify voltage between connectors at each section of hose. Voltage should drop incrementally for each section of hose further from Reactor. Use safety precautions when hose heat is turned on.