

## OVERHEATING PROBLEMS

**Issue:** System overheats or experiences high temperatures.

Each Vmax system is tested and checked at the factory prior to shipment to ensure trouble-free operation. In the unlikely event you encounter a problem, we recommend that you consult with your local distributor for parts/service. Remember, when calling for service, parts or system information, always have the pump or system model number and serial number ready.

[Click here to find your local authorized distributor.](#)

**WARNING!** Before attempting any repairs, disconnect all power from the system by switching off power at the main breaker or disconnect switch. Always use appropriate Lock Out – Tag Out procedures.

The Vmax oil-sealed liquid ring vacuum system is designed to run up to 200°F. If the vacuum system runs hotter than 200°F, it is usually caused by high ambient air temperature, lack of airflow across the heat exchanger (air-cooled units only), lack of water flow across the heat exchanger (water-cooled units only) or lack of oil flow.

Troubleshoot by checking the following items:

- Check the fluid level in the sight glass to make sure it is within the fill lines and that the pump is primed.
- Make sure the fluid isolation valve is open.
- Verify the pump is primed.
- Clean the oil strainer (sometimes referred to as the Y-strainer).
- On air-cooled units, check the heat exchanger (oil cooler) and fan to make sure there is adequate airflow across the heat exchanger. Clean the heat exchanger externally with compressed air. Ensure that a minimum of 12" of space is available in front of the cooler.
- Ambient air temperature should be below 110°F.
- Check that the oil solenoid valve (if installed) is working. Vmax systems use a solenoid valve, but VmaxLT systems do not typically use a solenoid valve. If the ambient air temperature is below freezing, the oil may thicken and restrict flow across the solenoid valve.
- Some systems are equipped with an oil bypass valve (temperature control valve). If the system is equipped with a temperature control valve, make sure it is opening and that oil is flowing through the heat exchanger. Caution! Oil will be hot!
- Check that the heat exchanger (oil-cooler) is blocked internally with solids passed through from the process. Clean if necessary. On air-cooled units, the temperature drop across the heat exchanger is 20°F to 25°F. If the temperature drop across the heat exchanger is significantly more or less than 25°F, it is an indication that the heat exchanger is blocked and little to no oil is going across the heat exchanger.
- Some systems are equipped with spin-on oil filters. If the system is equipped with this option, change the filter, as a dirty filter can restrict oil flow.
- Some systems are equipped with a water-cooled heat exchanger. Make sure there is adequate water flow across the heat exchanger. Inspect tubes for buildup of calcium, lime and/or rust which can restrict the flow of cooling water through the heat exchanger. If cooling water tubes are plugged, Scale-eX descaling compound can be used to dissolve the scale.

