Troubleshooting Tips Dry vacuum pumps

	Observed problem	Problem source	Corrective measure
1.	Pump will not start	1a. Motor and/or control wiring faulty	1a. Check wiring and connections for correct rotation
		1b. Pump seized or damaged due to product buildup	1b. Remove buildup by solvent soaking or disassemble the pump to clean and repair it
2.	Poor level of vacuum	2a. Blockage in piping	2a. Clean piping and strainers
		2b. Faulty system valve	2b. Check valve operation and settings
		2c. Inlet filter element clogged	2c. Check inlet filter
		2d. Liquid in the pump	2d. Pump liquid from the pump
		2e. Clearance opened up	2e. Check clearances and the pumps for wear
3.	Excessive amperage/power consumption	3a. Product buildup	3a. Remove buildup by solvent soaking or disassemble the pump and clean
		3b. Blocked exhaust piping	3b. Clear blockage
		3c. Liquid in pump	3c. Pump liquid from pump
4.	Loss of oil pressure	4a. Oil pressure switch faulty	4. Check wiring and switch, replace as necessary
		4b. Low oil level	4b. Correct oil level
		4c. Mechanical seal failure	4c. Replace mechanical seals
5.	High inlet temperature	5. Process conditions are different	5. Review and correct process conditions
6.	High exhaust temperature	6a. Loss of cooling	6a. Check and correct cooling liquid supply
		6b. Blocked exhaust	6b. Clear blockage
		6c. Blockage in oil cooler or cooling jackets	6c. Clear blockage
		6d. RTD sensor faulty	6d. Check wiring and sensor, replace as necessary
7.	Low exhaust temperature	7. Liquid in pump	7. Pump liquid from pump
8.	Mechanical seal failure	8a. Pump was pneumatic tested or overpressurized at standstill	8a. Relieve pressure and lubricate mechanical seals before operating
		8b. Mechanical seals lost lubrication and overheated while in operation	8b. Replace mechanical seals

Reference:

http://www.graham-mfg.com/dptroubleshooting.html