

How to Drain Charge, and Re-Start Thermal Oil Systems More Efficiently

Draining Systems – Before draining your system, have the fluid analysed by the manufacturer to determine if flushing or cleaning is actually necessary. If it is, you'll get more of the crud out by keeping the fluid as hot as possible (200°F — 210°F) while draining. Also, run the pump until cavitation occurs...this keeps system contaminants from settling out.

Charging Systems – Throttle the block valve on the main pump discharge for cold circulation (or cycle a gear pump on and off) to prevent pump damage. Add fluid when the pump cavitates and slowly increase the flow rate until the entire system is full. Make sure you fill all the loops.

Heater Startup – Increase the system temperature slowly to between 210°F and 250°F. Pump cavitation and expansion tank “geysers” mean there is water in the system. The only way to completely remove water is to flash it to the atmosphere. System is dry when pump is stable at suction temperature of 230°F.