



Pre-Startup Checklist for Steam Fired TH750/500 Fluid Heaters

The following is a list of items that should be confirmed prior to the commissioning of your Thermaflo Water Heating Equipment. If the installation instructions have been followed, most of these points will be redundant.

1. Confirm the inlet and outlet heated fluid connections are hooked up correctly to insure the proper direction of flow through the heater. Check for any leaks and remedy before startup. Piping leaks occur from install, shipping, and general installation. Do you have the submittal data sheet for your project on hand?
If no contact your representative and make sure that you have this. The submittal contains many details that are exclusive to your project. Make sure your conditions match the submittal before startup such as inlet steam pressure, flow GPM ect
IMPORTANT NOTE: Each EC800 Electronic Temperature Controller has been factory programmed with your setpoint. Please do not attempt to change settings before Thermaflo or Rep personnel are on site. Attempting to change settings can damage the temperature control program and will prolong startup and void the controller warranty.
2. Confirm the steam supply piping is installed following good piping practice. An inlet wye strainer, and properly designed drip leg, with a drip steam trap, has been installed in the steam line drop to unit to remove condensate ahead of the control valve. Make sure the steam is in fact on and ready for use at startup.
3. Confirm the steam condensate is piped to properly gravity drain from the equipment. Condensate should never be returned to an overhead condensate return system without the aid of a properly sized and selected condensate return pump. The exception is when a condensate return pump has been furnished as a direct component of the heater skid package. No lift can be tolerated.
4. Ensure the control panel has been completely wired with the correct phase and voltage electrical source as required. We recommend that each heater control panel be wired through a separate switch between the power source and the heater control panel so that it can be de-energized for service. Follow local building code for all electrical connection. Power must be on and usable.
5. If pneumatic control valve is supplied check that all air lines and wiring connections are hooked up and securely fastened. Must be ready to use for startup
6. Check that all the piping and flange connections, including the heat exchanger head bolts, are tight in accordance with the factory Installation & Maintenance Manual that was provided with each heater. Retorque is required to prevent leaks.
7. Confirm each Pressure and Temperature Relief Valve is piped separately to an open drain or to meet local code requirements.
8. Confirm Over Temperature solenoid valve is piped to an open drain or to meet local code requirements.
9. Check that steam can be delivered to the heater at the design pressure & volume required per specification. If unsure consult factory for additional clarification.
10. Check the steam supply line size to make sure it has been sized and installed per the IOM and hookup. The steam control valve size is NOT the supply line size.
11. Are water users operational so that a reasonable demand can in fact be established for startup.

12. Check to make sure that main drip steam traps have been located every 150' in the main steam supply to ensure a good steam quality to the heaters. If this is not done the TH750 can suffer from temperature swings and total capacity. Steam quality is very important and must have careful attention. Are these traps in place?
13. It is the responsibility of the installer of the TH750/500 system to complete the above check list. Please sign below when all the above points have been completed so that a successful startup can be completed.

Installer Signature: _____ Date: _____

Installing Company: _____

IMPORTANT: Upon arrival to the jobsite for startup if it is found that the check list above is incomplete or not in fact finished, the startup and commissioning will be delayed and additional startup cost will be incurred.

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