TEC – 033109 (Mar 31, 2009)
Heat Exchanger Maintenance

TECHNICAL BULLETIN

Overview: ETI incorporates brazed plate heat exchangers in certain compressor units and water heating modules. That equipment is integrated with field-designed domestic water or hydronic water systems. ETI equipment is designed to operate using a water supply that may have been treated with chlorine in normal amounts for purification purposes, as determined by a municipal water treatment facility. However, domestic or commercial water systems may be serviced to eliminate bacterial contamination by subjecting them to a "super-chlorination" or "shock chlorination" process. That system-flushing process requires circulating a water solution having a chlorine content of 200 ppm or more. A water solution with that chlorine content is a major hazard to the brazed plate heat exchanger and circulating water pump, and should never enter or be circulated through the heat exchanger while decontaminating the hydronic or domestic water supply system.

Models: The subject heat exchangers are integral to compressor unit series SCW, HCW and HWW; hydronic water module series HWM, and domestic water module series DWM.

ETI Actions: Clear warning statements, instructions and illustrations are being added to the appropriate specification and installation literature regarding the protection of ETI equipment during a super-chlorinating process

Field Actions: Prior to implementing a super-chlorinating system flushing process all existing compressor units with integral heat exchangers and water modules shall be isolated by shut-off valves from the domestic or commercial water system.

During a system flushing process all new installations of compressor units with integral heat exchangers and water modules shall be isolated by shut-off valves to prevent the super-chlorinated solution from entering and circulating through the ETI equipment.

After a water system and the previously isolated ETI equipment undergo a super-chlorinating process, the water system shall be thoroughly flushed. The water supplied by the system after flushing shall be tested and verified to be at a normal chlorination level. Prior to opening the valves and allowing water to re-enter the ETI equipment. The water test and analysis shall be done by a professional water analyst.

As a normal part of the heat exchanger maintenance process, it may be necessary to clean the brazed plate heat exchanger. This is an entirely separate process from the super-

chlorinating system flush process just described. The procedure for cleaning the heat exchanger with an approved cleaning solution that is safe and effective for the brazed plate heat exchanger and the circulating pump is detailed in the appropriate EarthLinked installation manuals.

Frequently Asked Questions:

Q: Where can I find instructions regarding the isolation of EarthLinked equipment?
A: The appropriate equipment installation manual will have complete instructions and illustrations.

Q: Where do I find instructions for the approved cleaning solution and proper procedure for cleaning the heat exchanger?
A: The appropriate equipment installation manual will have complete details concerning the approved cleaning solution, where to buy it, how to mix it, and the step-by-step heat exchanger cleaning procedure. This cleaning solution is safe to circulate through the circulating pump and the flow meter.

Contacts: For further assistance, call ETI Technical Service at 863-701-0096 or 866-211-6102 and talk to Russ Bath, Jim McDuffie or Joe Serdynski.