



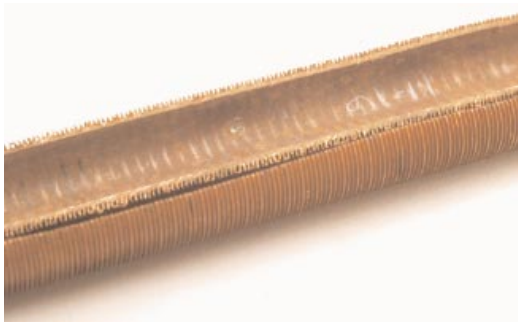
YORK®

Enhancement Services

Tube Testing



Freeze Damage This evaporator tube ruptured due to a control failure. When water and refrigerant mix, corrosive hydrofluoric and hydrochloric acids are formed, leading to expensive downtime and costly hermetic motor repair.



Internal Pitting This type of damage is caused by abrasive or corrosive products in the condenser water loop and will usually result in pinhole leaks.



Erosion & Metal Deposits are caused by the electrolytic properties of water flowing through the tubes, and will eventually result in leaks.



Support Wear is usually caused by the boiling action of refrigerant around the tube. Wear occurs where the tubes are supported, resulting in system leaks.

The condition of heat exchanger tubes is vital to efficient, reliable chiller operation. Tube failure, examples of which are shown at left, can result in catastrophic chiller failure. Repair can be expensive and time-consuming, as tube failure can contaminate the refrigerant system and cause hermetic motor burnout.

Unfortunately, tube condition is not readily visible. Not only are tubes hidden inside the shell, but the condition of internal tube walls is also hidden from sight.

Eddy current tube testing is an inexpensive electronic method used to analyze tubes in place. It gives you a thorough picture of the condition of each tube within the shell. As one of the most effective methods for finding leaks and other tube faults, eddy current tube testing offers these benefits:

Minimizes downtime

Unexpected chiller failure caused by tube failure can result in lengthy downtime for expensive repairs. Eddy current tube testing conducted on a regular basis can provide advanced warning of developing problems, allowing repairs to be scheduled during planned shutdowns. In addition, this method of tube testing requires considerably less time than physical inspections.

Minimizes risk of costly repairs

Eddy current tube testing provides valuable information on chiller performance, providing advanced warning of problems before costly repairs are needed. Corrective measures can be taken by York® Service with the assurance that all work is performed by experts in HVAC technology.