



## PLASTOCOR OPERATIONS MAINTENANCE GUIDELINES

1. Do not allow the condenser to exceed the maximum design operation temperature. Plastocor P-400U and P-2000U have an upper immersion temperature limit of 200 to 220 degrees F.; however, over heating the condenser can cause abnormal stresses in the tubesheet and tube to tubesheet joint that can damage the coating.
2. Do not allow the condenser to freeze. Plugged tubes that have been coated over may have impounded water that will expand and push the tubesheet coating off the sheet.
3. Avoid impact, such as hammer blows or gouging. This is normally associated with workmen removing tube obstructions or improper use of tube cleaning equipment.
4. Do not plug tubes with driven tapered brass or fiber plugs. Use expandable rubber, neoprene or Pop A Plugs that do not put pressure on the coating. Expandable plugs must be set into tubes at least 1/4 to 1/2 inch to avoid pressure on the coating.
5. Do not use pressure-water cleaning at over 3,000 psi to remove bio-fouling from tubesheets and waterboxes. If higher pressure is used to clean un-coated tube interiors, do not allow the lance to pass over the coating while operating.  
  
Pressure-water cleaning of tube I.D. coating is not allowed. Pressure-water cleaning on tube I.D. coating voids the warranty. Use of air/water guns or Conco type tube cleaning systems is acceptable. Use only Conco Delrin plastic nozzles or equal; never use brass or metal nozzles. If cleaning occurs at above ambient temperatures (ie. on line cleaning) contact Plastocor before cleaning begins.
6. Induced current cathodic protection systems must not exceed -.750 volts where tube I.D. coating is installed. Higher voltages will cause the I.D. coating to fail. It is recommended that the CP system be checked and assured not to exceed this voltage limitation.
7. Trash racks on intake water systems should be operating properly. Excessive debris in the cooling water will increase wear of the coating and can potentially reduce cooling water flow allowing an over heat condition.