

**PART 1 - GENERAL****1.1 REFERENCES**

- .1 American Society for Testing and Materials, (ASTM).
  - .1 ASTM A47/A47M-99, Specification for Ferritic Malleable Iron Castings.
  - .2 ASTM A278M-01, Specification for Gray Iron Castings for Pressure-Containing Parts for Temperatures up to 650 degrees F (345 degrees C).
  - .3 ASTM A516/A516M-96(e1), Specification for Pressure Vessel Plates, Carbon Steel, for Moderate - and Lower - Temperature Service.
  - .4 ASTM A536-84(1999)e1, Specification for Ductile Iron Castings.
  - .5 ASTM B62-93, Specification for Composition Bronze or Ounce Metal Castings.
- .2 Canadian Standards Association (CSA International).
  - .1 CSA B51-09, Boiler, Pressure Vessel, and Pressure Piping Code.

**1.2 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures. Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.

**1.3 QUALITY ASSURANCE**

- .1 Health and Safety Requirements.
  - .1 In accordance with section 01 35 29.06 - Health and Safety Requirements.

**PART 2 - PRODUCTS****2.1 AUTOMATIC AIR VENT**

- .1 Air vent with float, industrial type: body in iron with NPS ½ joint designed for nominal work pressure of 860 kPa.
  - .1 Float: designed for working temperature of 115°C.

.2 Usage:

.1 On piping diameter less than NPS 2 with water-glycol mixer.

.2 Install a bronze ball valve at every air vent.

## **2.2 EHTYLENE GLYCOL FLUID**

.1 Supply and install a 50% ethylene glycol (Dowtherm or Domcol) and 50% distilled water mix with rust inhibitors in sufficient quantity for the glycol cooling circuit (relocation of the fluid cooler).

.2 Minimal alkalinity of 10.0 ml.

.3 Calculate volume require.

## **PART 3 - EXECUTION**

### **3.1 GENERAL**

.1 Recover glycol prior to relocation of fluid cooler. Fill to 60% of the capacity of the existing glycol pressurization tank. Be sure to use the same type of glycol with the same concentration as the existing glycol solution. After replacing the glycol cooler on the initial location, make sure to keep the glycol in the tank at the existing level prior to the work.

### **3.2 AIR VENT**

.1 Install air vent on piping and for equipment, upstream at high points, before each fluid drop, and where specifically indicated.

.2 Air vent must comply with indications and have an isolation valve.

**END OF SECTION**