

NEPTUNE SPECIFICATION FOR GENERAL USE
Glycol Feed System

- I. General – Provide a completely, preassembled package Glycol Feed System as manufactured by Neptune Chemical Pump Company.
- II. Pump – The pump shall be a bronze rotary gear pump with a capacity of 1.5 g.p.m. at a pressure of 100 p.s.i. (optional 3 g.p.m. at 100 p.s.i.). Pump shall be mounted below the tank.
- III. Tank – The tank shall be constructed of polyethylene and be provided with a four-leg carbon steel stand with four bolt pads. The tank stand shall have upper and lower steel support banding to insure tank stability. Tank stand shall be painted with a two-coat system consisting of an oxide primer and alkyd enamel finish.
- IV. Piping – Pump suction piping shall be piped using PVC fittings and tubing. A PVC ball valve and a cast iron “Y” strainer shall be provided in the pump suction piping.

Pump discharge manifold shall be piped using Schedule 40 brass fittings suitable for chilled or hot water service. A pressure switch, ball valve, brass check valve and brass relief valve shall be mounted on the pump discharge assembly manifold. Piping shall be supported at both the top and bottom of the tank frame. The brass relief valve shall be piped back to the tank using PVC tubing and fittings. A pressure gauge shall be mounted in the discharge piping.

- V. Panel – A 115 volt control panel with NEMA 4X enclosure consisting of the following shall be provided:
 - H-O-A selector switch with running light and magnetic starter for feed pump. In AUTO, the pump is operated by the skid-mounted differential (adjustable) pressure switch and interlocked to a low level float switch mounted in the side of the tank. Level switch also energizes a low level (optional) audible alarm with silence push button for alarm acknowledgement. Panel shall also be equipped with an 8’ power cord with grounded plug. Panel shall be mounted to the tank frame and positioned at eye level for ease of operation. Panels mounted on tank lids or mounted below the tank are unacceptable. All electrical components (pressure switch, level switch, and pump) shall be wired in conduit to control panel. Loose, exposed, unprotected wire is unacceptable.

