

Suction Vent Line Characteristics

When a system is likely to impose large pressure transients in the vessel, the likelihood of moderate amounts of vapor getting into the pump suction is great. In this case, a suction vent line is an option available to minimize the amount of the entrained vapor. The suction vent line should exit from the top of the suction, near the pump suction flange, and run to the vapor phase of the vessel. An eccentric reducer with the flat on the bottom creates a high spot on the suction where the vapor can be trapped, and expelled via the suction vent line to the vessel. The diameter of the suction vent line should be least 1-1/4". Moreover, the suction vent line should remain open during operation. Finally, the suction vent line should contain an isolation valve for servicing.