Wallace & Tiernan® Gas Feed Systems
Line Connections and Fittings
For Chlorine and Sulfur Dioxide

Pressure Gauges - for gas and liquid
Gauges are available for different pressure ranges. They can be selected in 0 to 30, 0 to 60 (chlorine service only), 0 to 160, or 0 to 300 psi ranges. These gauges have 1/8-inch male NPT connections.

Gauges that have ¼-inch male NPT connections are also available. They are calibrated in a range of 0 to 200 psi. A 500 psi pressure point is shown on the dial face. The diaphragm is rated to 800 psi. This gauge is designed for use with evaporator pressure relief systems and liquid line pressure relief systems. It is recommended that a header valve be used between the pressure gauge and the gas line so that if the pressure gauge is damaged or requires service, the entire system will not have to be shut down.

Ammonia-Type Unions - for gas and liquid
Ammonia-type unions with gaskets are used to simplify installation and inspection of chlorine header pipes. They are available in 3/4- and 1-inch NPT. A reducer union for 1-inch to 3/4-inch NPT is also available.

Gas Manifolds
Manifolds are used to connect two or more 150lb supply cylinders to a chlorinator or a pipeline. Manifolds are required whenever the maximum feed rate exceeds the maximum continuous withdrawal rate of a single 150-lb cylinder. This is approximately 50 lb per 24 hours.

Manifolds are available to handle flexible connections to two, three, five, or ten cylinders. The two- and three-cylinder manifolds have 5/8-inch female straight thread inlets and a 3/4-inch female straight thread outlet. The five- and ten-cylinder manifolds have 5/8-inch female straight thread inlets. The outlet terminates in a valve with 3/4-inch male straight thread discharge.

The two- and three-cylinder manifolds are usually mounted on the chlorinator. Five- and ten-cylinder manifolds are usually wall mounted.

Connection - Tank Car
This flexible coupling between tank car and permanent liquid supply line provides a simple and convenient hook-up. The connection consists of a length of 1-inch copper tubing, each end fitted with a 1-inch flanged union. A loop, put in the line to provide some play, reduces the point-to-point length to approximately 5½ feet.
Gas Line Strainer
3/4-inch and 1-inch strainers are recommended for installation upstream of chlorinators and sulfur dioxide feeders to minimize the carryover of impurities.

Flexible Connections - For Gas and Liquid
Flexible connections made of copper tubing, with fittings at both ends, are manufactured for gas service. Part numbers and tube sizes, connections, and lengths include:

UX_-493

3/16-inch OD tubing with 5/8-inch male straight pipe thread connections at both ends. Lengths are: 3 ft UXA-493; 4 ft UXB-493; 6 ft UXC-493; 10 ft UXD-493; 15 ft UXE-493.

UX_-235

3/8-inch OD tubing with 5/8-inch male straight pipe thread and 3/4-inch female straight pipe thread connections. Lengths are: 4 ft UXC-235; 6 ft UXD-235.

UX_-1098

3/8-inch OD tubing with 3/4-inch female straight pipe thread connections at both ends. Lengths are: 3 ft UXA-1098; 4 ft UXB-1098; 6 ft UXC-1098; 10 ft UXD-1098; 15 ft UXE-1098.

These flexible connections are used with supply cylinders, ton containers, manifolds, headers, and chlorinators to form the required connections. They are also used to connect a pressure reducing valve to a chlorinator or to form a by-pass around the valve. Where requirements exceed the maximum length of a flexible connection, seamless steel pipe should be used. See Chlorine Institute Manual for detailed recommended piping practices.

Adaptors and Unions - for Gas and Liquid
Adaptors and union couplings are made for connecting flexible connections (male or female) to NPT pipe. They include:

Adaptor P-7737
3/4-inch male NPT x 3/4-inch male straight pipe thread.

Adaptor P-8622
1/2-inch male NPT x 3/4-inch male straight pipe thread.

Double Union U-8614
3/4-inch female straight pipe thread at both ends.

Union Coupling U-9737
3/4-inch female straight pipe thread x 3/4-inch male NPT.

Union Coupling U-21359
3/4-inch female straight pipe thread x 1-inch male NPT.

Gaskets
Siemens Water Technologies makes gaskets in a variety of sizes for chlorine gas, liquid or solution service. Materials are selected to give the longest service possible in a particular application.

References
Additional technical data, such as dimension drawings and typical arrangements of chlorine line connections and fittings, will be sent on request.