

General

Vacuum chlorinators are made of PVC for consumption of chlorine gas. PVC is absolutely resistant against the chemical attack of gaseous chlorine, but liquid chlorine suddenly destroys PVC. Therefore the way of installation must avoid liquid chlorine inside the chlorinators.

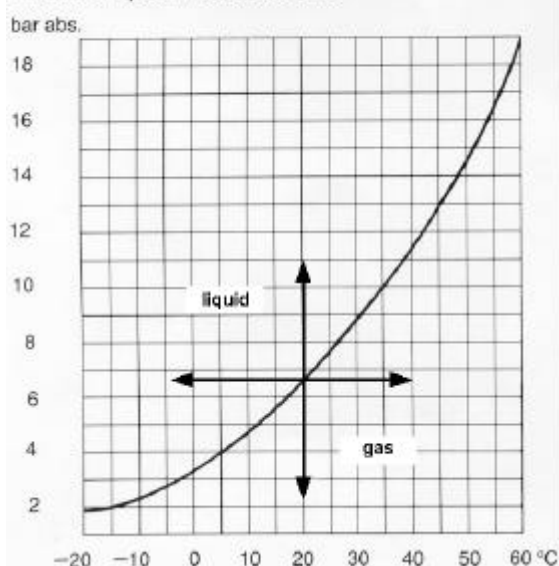
Most important is a steadily climbing pipe from the tank to the chlorinator to allow drops of chlorine running back into the tank.

Sometimes this is not possible or the flow of chlorine gas doesn't allow the drops passing the gas flow. Then a catchpot is installed below the chlorinator. Drops of chlorine are falling down into the catchpot and are simply evaporated by the temperature of the atmosphere.

Reliquification

The gas usually is supplied from cylinders or tanks filled with liquid chlorine. The pressure of chlorine behaves according to the evaporation curve. Due to the presence of both liquid and gas inside the tank the vapor is saturated.

Diagram A
Chlorine Vapour Pressure Curve



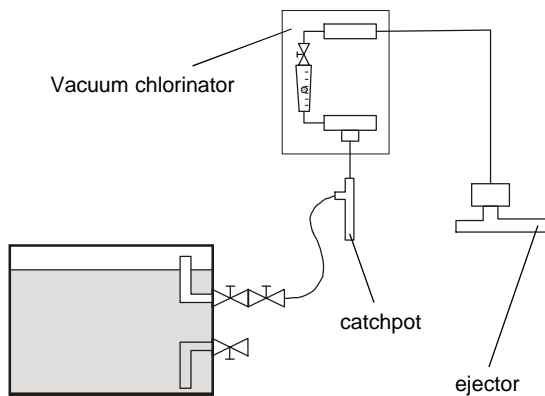
Therefore at every point in the system cooler than the tank the chlorine is condensating. This behavior is independent from the absolute temperature. It happens at 5°C and at 50°C, too.

In such cases a catchpot, a heater or a pressure reducer are required.

Liquid chlorine at startup of drums

The internal design of drums is like shown in the installation scheme. The upper connection allows the consumption of chlorine gas and the lower connection the consumption of liquid chlorine.

Typical installation



But during transport of the drum the internal pipe for the gas connection is filled up with liquid chlorine. After connection of a new drum nearly 100cm³ liquid chlorine are supplied before gas can be taken out.

To protect the chlorinator against this liquid chlorine catchpots are needed.

Technical Data

Volume	40 cm ³
Material	Steel
Connection	Copper Pipe d 8x1
Part No.	22613668

Volume	200 cm ³
Material	Steel
Connection	inlet: Gland nut W 1 1/4" for installation direct at the drum valve outlet: tread W1" male for installation of a chlorinator
Heater	230V/50-60Hz, 31W
Part No.	22613668

Other dimensions or designs on request.