

## **Benefits of ChlorTainer® - Total Containment System**

### **Prevents Handling Chlorine While in a Confined Space**

The containment vessels need only be sheltered from direct sunlight and rain; this allows the operators to be in an open air structure. The cylinders are sealed within the vessel for processing, and a release, should it occur, is contained within the vessel. Containing a leak without confining the operator in the same space with the release provides a safer working environment.

### **Saves Construction and Installation Costs**

In many instances the containment vessels and loader systems fit into the facility with little or no additional construction required. Therefore, the associated construction cost of incorporating the ChlorTainer® systems is typically low.

The containment vessels are set into place and bolted down for seismic restraint. The fixed loader system is a simple “bolt-together” design which is also bolted down. The simplicity of the system requires very little additional engineering, and the staff at TGO Technologies is available to help with the layout design.

### **Enhances Site Security**

When a cylinder is completely contained, the access to it is restricted. The likelihood of tampering with or the unauthorized manipulation of the cylinder supply valves is greatly reduced.

Additional security features can be incorporated into the system, such as: heavy duty door locks with admission tracking memory.

## **Easy to Operate**

The chlorine cylinder is placed on the loader system and then rolled into the vessel. The vacuum regulator is affixed to the top of the vessel, so a simple yoked connection to the cylinder valve is all that is required. The vessel is then sealed for processing.

The simplicity of the system makes for easy operation.

No scrubber systems, additional fans, pumps, tanks or mechanical devices are needed for the Containment System to function. Less equipment means few repairs, easy maintenance and dependability of operation.

## **Cost Effective**

Chlorine gas is the most economical form of chlorine to use.

With ChlorTainer® , should a contained cylinder fail, all of the chlorine is processed. Electronic, electrical, or other sensitive equipment is not contaminated. Scrubbers are not needed. Hazardous waste is not generated. Therefore, high maintenance and disposal costs are eliminated.

The minimal maintenance requirements of the system help to keep operating costs low.

## **Fail-Safe Protection**

The nitrogen powered fail-safe actuator will automatically close the chlorine supply valve in the event of a power loss or a chlorine leak outside the vessel. This fail-safe device ensures that all of chlorine is contained within the vessel until it is safe to resume normal operation. An automatically resetting seismic detection device can also be connected to this system.

Total containment is the only method that offers true seismic safety and passive protection.

### **Safe, Dependable Operation**

Once the cylinder is sealed within the ChlorTainer® vessel, any accidental release from the cylinder is contained within the vessel and put back into process at the normal flow rate through the vacuum regulator. The vessels are built to ASME code and have been designed to withstand the maximum pressure produced by a failed cylinder.

The passive design does not rely upon pumps, scrubbers, fans, caustic solution or back-up emergency power to protect the operator, the plant or the environment.

Industry leaders recognize total containment as the safest technology available for chlorine processing and leak mitigation.