600 Emlen Way
Telford, PA 18969

Specifications for the Hydro Chlor Safe System

Specification Chlor Safe
Emergency Shut Off System

HYDRO INSTRUMENTS CHLOR SAFE SYSTEM

1.01 GENERAL

1.01.1 Completeness

The system shall be complete with all components, equipment, and appurtenances.

1.01.2 Quality Assurance

All materials and components shall be new and unused of first quality by well-known manufacturers. Inferior materials or components shall not be allowed.

1.02 MANUFACTURER

The manufacturer shall be Hydro Instruments, Telford, PA, USA or approved equal. The system shall be Hydro Instruments Chlor Safe.

1.03 SYSTEM DESIGN

1.03.1 Emergency Shut Off System

1. The system shall be electronically controlled using pneumatic ratchets to close the chlorine ton container liquid valves in emergency situations.
2. The system shall include a dedicated electronic controller, Nitrogen cylinder, Nitrogen pressure reducing valve, Nitrogen pressure gauges, and all required piping etc… required to make a complete system
3. The system shall include four sets of pneumatic actuators and mounting assemblies set to close the liquid valves on four chlorine ton containers. Each pneumatic actuator set shall include a stainless steel support device.
4. In the event that AC power supply is lost, the system shall be designed to be able to close the chlorine ton container valves.
5. The system shall close all four chlorine container valves immediately upon receiving an alarm signal from a chlorine gas leak detector.
6. The system shall also include a large emergency push button for manual actuation.

1.04 DETAILED SPECIFICATIONS

1.04.1 Detailed Specifications

1. The electronic controller enclosure shall be NEMA 4X rated.
2. The control system shall allow the Nitrogen pressure to be set at 100 PSI.
3. The system shall include a battery backup system to assure continuous operation in the event of AC power loss. The battery backup shall be capable of operation for 8 hours or more.
4. In the event of low battery voltage, the system shall provide an alarm indicator light to indicate this alarm condition.
5. In the event of low Nitrogen pressure, the system shall provide an alarm indicator light to indicate this alarm condition.
6. The pneumatic actuator ratchet torque shall be 10 to 75 ft-lbs.
7. The power supply for this system shall be single phase 110VAC, 60 Hz.