

# Specifications for Hydro Instruments Model EJH-3100-CL2 3" Variable Orifice Ejector

## 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.

#### 1.03 VARIABLE ORIFICE EJECTOR

- 1. The ejector shall provide the operating vacuum for the system using a water operated venturi type nozzle.
- 2. The ejector shall provide chemical feed rates of up to 10,000 PPD (200 kg/hr.)  $\text{Cl}_2$  by means of an adjustable orifice nozzle. The nozzle orifice shall be adjusted by a rotating handle, increasing/decreasing the nozzle orifice area allowing/restricting water flow to obtain the appropriate chemical feed rate.
- 3. Ejector performance shall be based on the ejector charts and tables published by Hydro Instruments for the model specified.
- 4. The ejector shall be equipped with 3" Van Stone style socket flanges on the inlet and outlet to allow for the process water connection.
- 5. The ejector shall incorporate a spring loaded, normally closed internal check valve assembly to prevent the back-flow of water into the chlorine gas equipment. The check valve shall be suitable for backpressures up to 100 psi (7 bar).
- 6. The ejector shall stop chemical feed and the check valve shall close automatically upon loss of vacuum.
- 7. The ejector shall have a 1 ½" PVC union for connection to the chemical feed line.
- 8. The ejector shall be constructed from PVC and other chemically compatible materials.