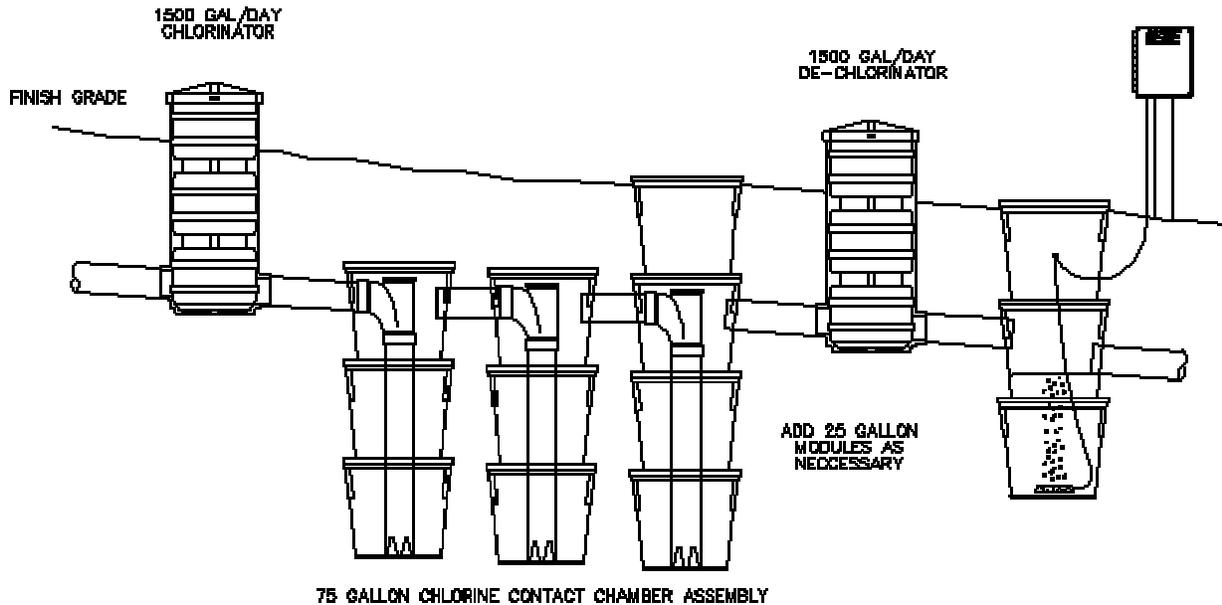


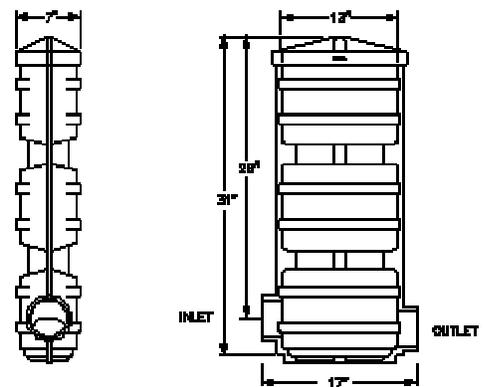
CHLORINE DISINFECTION

With Chlorine Contact, Dechlor, & Reaeration



CHLORINE DISINFECTION

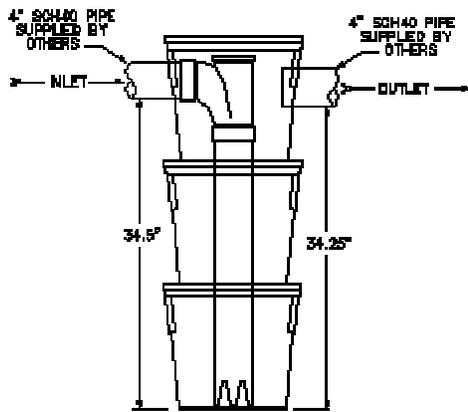
Chlorination is the most common method of disinfection for wastewater discharges. Contact time and mixing must be provided for chlorine to kill the bacteria in the wastewater stream. The contact time will differ based on the potential for the contact reactor to short circuit. Many codes will allow a design of 30 minutes retention only if a contact chamber is provided with a 20:1 length to width ratio for proper contact time. If the residual chlorine may itself pollute, then dechlorination may be required. This takes the same feed unit but different tablets. The dechlorination process is nearly instantaneous so no contact time is required. However it does rob the water of free oxygen so reaeration may then be required if discharging into a live aquatic environment.



CHLORINATION UNIT

REACTOR DESIGN

The American Manufacturing Company Chlorine contact chamber provides both a 20:1 ratio and 30-minute contact time for residential gravity flows. The Chlorine Contact Chamber is designed with an up and down flow pattern using three modules in series to achieve an average 20:1 length to width ratio. The water will flow down the 4" diameter drop pipe and then rise in the 13" wide (average) box. The resulting turbulence will enhance mixing. In conventional chambers the length to width ratio is based on rectangular shapes. The drop pipe is circular plus being in the center of the box it will decrease the flow path between the pipe and the sidewall resulting in a better than conventional configuration.



CHLORINE CONTACT MODULE
25 GALLON CAPACITY

CHLORINATOR & DECHLORINATOR

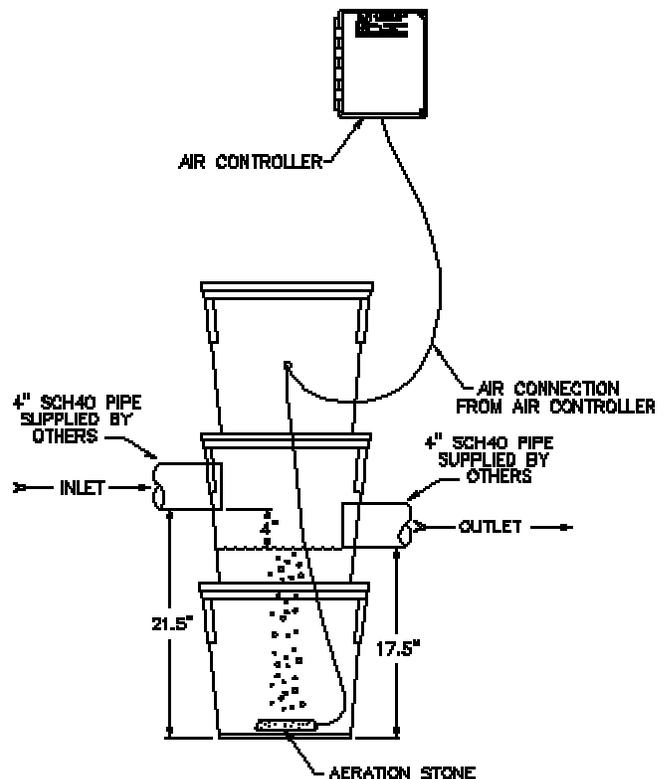
The Model 100 has a 4 1/2" diameter inlet and outlet. It is designed to handle the flow of treated effluent for design flows up to 1500 gallons per day. The Tablet Chlorinator has no moving or electrical parts. It uses Disinfecting Tablets - not powders or gases. The Chlorinator works by gravity flow alone - chlorine dosage automatically adjust with increases and decreases in effluent flow. This same unit works as a DeChlorinator.

CHLORINE CONTACT MODULE

Chlorine Contact time shall be provided to kill bacteria in the wastewater effluent. The chlorine contact chamber shall provide a 20:1 average length to width ratio and sufficient contact time for the effluent flow. Provide an American Manufacturing Company, Inc. Chlorine Contact Chamber with a minimum of 3-modules (75 gallons). Provide more modules for added capacity as required.

REAERATION

This reaeration module provides a 25-gallon reservoir for influent water to mix with and reaerate with air induction from a fish tank aerator readily replaceable from most local fish stores. Dechlorination will remove free oxygen form the effluent and this device will reaerate for residential applications.



Copyright ©, American Manufacturing Company, Inc., 2000