

**OPERATIONS AND MAINTENANCE MANUAL**

**IMPORTANT! READ & UNDERSTAND THIS ENTIRE  
MANUAL BEFORE USING PRODUCT.**

CUSTOMER \_\_\_\_\_

JOB NO. \_\_\_\_\_

MODEL NUMBER \_\_\_\_\_

SERIAL NUMBER \_\_\_\_\_

DATE SHIPPED \_\_\_\_\_

FOR SERVICE OR TECHNICAL INFORMATION CALL 330.562.TANK (8265) BETWEEN  
THE HOURS OF 9:00 AND 5:00 EST, MONDAY THROUGH FRIDAY.

## **Water Test Report**

*Return this completed page to fax number: 330.562.2560*

Date of Test: \_\_\_\_\_  
(MONTH/DAY/YEAR)

Tested By: \_\_\_\_\_  
(PRINT YOUR NAME)

Length of Time Tested \_\_\_\_\_  
(HOURS/MINUTES)

# O & M MANUAL

**SCOPE:** This manual is intended to familiarize the user owner with the usage of your tank. If you encounter a situation where you are not sure what is the proper action call our service department at 330.562.TANK (8265) , 9 AM to 5 PM, EST.

## I. SHIPPING

Generally, tanks 2,000 gallons and smaller will be shipped via common carrier and larger tanks shipped via dedicated truck. For tanks that must be shipped on their sides, the most direct method will be employed.

## II. RECEIVING

- A) Upon receipt look for shipping damage. While this is not common, any damage must be noted on the freight company receipt in order for any claims to be pursued.

### Handling

1. Most **tanks** are shipped with lifting lugs. You must use care when receiving and handling plastic tanks. Always use a spreader bar when lifting larger tanks (smaller tanks may only be equipped with one lifting lug).
2. Avoid any sharp point contact to the tank.
3. Always place on a solid, flat, clean surface with total bottom support.
4. For lifting, use nylon straps and slings. Do not use chains to handle tanks.
5. Be careful not to expose fittings to sharp blows as they are plastic and subject to damage in handling.

## III. STORING

- A) Short term: (up to 6 weeks)
1. Upon receipt, the **tank** must be stored in a vertical or horizontal position insuring that all fittings are protected and manways are in place. Do not remove any fitting blanks until you are ready to install piping to your tank.

## IV. INSTALLATION

### A) Handling

1. Most **tanks** must be installed on a solid flat pad or stand. The tank bottom/stand requires 100% bottom support.
2. Avoid any sharp point contact to the tank.
3. Always place on a solid, flat, clean surface with total bottom support.

4. Use nylon straps and slings, do not use chains to handle tanks.
5. Be careful not to expose fittings to sharp blows as they are plastic and subject to damage. Do not allow tank to “swing” while it is being stood upright. Lower fittings on tank side walls, and on cone bottoms are easily damaged with this type of force.

- B) Your **tank** must be installed on a solid flat pad or stand. The tank bottom requires 100% bottom support.
- C) Insure that **NO** foreign materials such as rocks are stuck to the bottom of the tank prior to placement on pad.
- D) Your tank should be installed vertical and plumb.
- E) Allow for tank expansion and contraction when piping to all fittings. As most tanks will be piped with schedule 80 PVC pipe it is not difficult to allow for movement. Tanks with fittings 3” and larger may require the use of expansions joints.
- F) All piping must be 100% independently supported from the tank.
- G) Some **tanks** are supplied with hold down bands. Do not pre-drill any anchor locations. Anchors should be installed after tank is on site by match drilling to lug locations.
- H) Do not tighten the lugs to your pad as you must allow for the tank to expand and contract during its usage. This ability to expand and contract is where the tanks get their strength.
- I) All piping to sidewalls, either by flanges or coupling, must be installed with its own independent support. It must also be non rigid to allow for tank flexing as noted above in item F. Common piping for Sodium Hypochlorite is socket connected sch. 80 PVC piping. It is not difficult to allow for flexibility up to 2”. Above 2” you may need to use expansions joints or hoses.
- As installations vary with field conditions, you must check your piping to insure you have adequate room for the tank to expand and contract.**
- J) All sidewall fittings will be shipped with blanks or plugs. Do not remove these until you are ready to attach piping.
- K) All flanged nozzles (WFN, WPFN) require 11 ft-lbs of torque to seal. **DO NOT OVER TIGHTEN.**
- L) WPFN or “Pad Flange” nozzles must be installed with correct bolts. Bolts that are too long can damage thread inserts. Over tightening can also damage this style of fitting.

(See Storage Notes)

## V. VENTING

- A) All **tanks** are designed to operate at atmospheric pressure.
- B) When connecting vent piping check to insure that line losses do not cause pressure on the tank. When connecting to a vent line that is assisted with blower; insure that a negative condition does not exist in the tank.

- C) IMPROPER VENTING CAN CAUSE PREMATURE TANK FAILURE AND WILL RESULT IN THE CANCELLATION OF ALL WARRANTIES.

## **VI. WATER TESTING**

- A) After the tank has been piped, close any bottom fittings and fill to the top of the straight shell with water for 8 hours min. DO NOT USE PRODUCT until this has been completed! Once the time has elapsed, and there are no leaks, then you may put your tank into service.
- B) CONDENSATION MAY FORM ON THE OUTSIDE OF YOUR TANK. This does not mean it is leaking. Make sure to thoroughly inspect all questionable areas before making a decision. If you do find a problem contact Protectoplas immediately.

## **VII. OPERATIONS**

- A) Insure that any changes to the installation do not effect the venting of the tank
- B) make sure that the chemical you are storing in the tank is compatable with the construction material.
- C) DO NOT OVERFILL THE TANK. The working capacity of the vessel is the straight side capacity. You must monitor the liquid level when the tank is not equipped with an overflow.

## **VIII. SPARE PARTS**

- A) There are no parts that should require routine replacement.
- B) Should you require any fittings, they are generally in stock for sizes 2” through 8” (mechanical). Fittings should not require replacement under normal operating conditions.
- C) The addition of extra nozzles will require a factory service call.

## **IX. REPAIRS**

- A) There are no customer repairs that can be made. If you feel there is a condition that requires action, contact our service department to discuss the situation.
- B) When contacting our service department, please have the serial number and model number available.
- C) For warranty claims a warranty repair form must be completed. This will be supplied by the service department.

## **X. HOLD DOWN SYSTEM (if applicable)**

- A) If you have purchased a cable hold down system **DO NOT PRE-DRILL CONCRETE PAD**. Your cable hold down system comes with pre-drill base plates which are used to mark anchor locations.
- B) Set your base plates a min of 2” from tank wall. All systems must have proper anchors installed in the concrete. All anchors are “by others”, check with local regulations for size/type requirements.
- C) All cable systems come with pre-cut cable covers. Make sure to install cable cover where the cable loops through your tanks hold down lug(s). Failure to install cable covers can and will result in damage to your tank.

*If you have any questions or concerns pertaining to these instructions please call Protectoplas at 330-562-TANK (8265) 9-5 east. Stan. Time.*