



## **Atmospheric Foam Concentrate Storage Tanks**

Standard Chemguard Atmospheric Foam Concentrate Storage Tanks are manufactured in Crosslinked polyethylene in vertical configuration. Chemguard also offers custom made tanks in stainless steel (304 or 316), carbon steel, and fiberglass. Vertical tanks are normally manufactured with flat bottoms and dome tops and horizontal tanks sit on saddles.

The fiberglass and polyethylene tanks do not have expansion domes due to the dome shape of the top of the tank. Inspection hatches are provided on both style tanks. Regardless of the material of construction, a pressure/vacuum vent must be installed. This is normally installed on the inspection hatch on the fiberglass or molded polyethylene tanks and on the cover of the expansion dome on the carbon or stainless steel tank.

### **IMPORTANT**

If using a carbon or stainless steel tank with AFFF type foam concentrates, Chemguard does not recommend lining the inside tank shell. The reason is that the tank and the liner have different coefficient expansion ratios during various ambient temperature cycles. Over time, pinholes may occur in the lining. AFFFs having a very good wetting ability will penetrate the pinholes and get in between the lining and the tank shell. Eventually portions of the lining may flake off and travel into the foam concentrate system, subsequently blocking orifices, strainers, etc. Upon receipt of your order and before any installation, inspect the tank for any damage that may have occurred during shipping to trim valves, piping, etc.

Chemguard does not supply any interconnecting piping, strainers, valves, etc. that are not specifically mentioned on any quotation or sales order.

When using AFFF or AR-AFFF type foam concentrates in any atmospheric type storage tank, it is recommended by Chemguard that a thin layer (approximately 1/4 inch) of a quality mineral oil be placed on the surface of the foam concentrate after

filling the tank with the correct quantity. This alleviates the problem associated with evaporation of the foam concentrate.

If any AFFF concentrate spills on any painted surface during any filling of the storage tank(s), immediately wash the area with water. The solvents in the AFFF may cause streaking of any painted surface.

It is recommended that when using non-freeze protected foam concentrates, that the foam tanks be located in an area that is kept between 35°F-120°F. All tanks offered by Chemguard are suitable for use with Chemguard manufactured and supplied foam concentrates.

### **INSTALLATION**

If the tank has been received in a satisfactory condition, place the tank in the desired level location and if necessary, anchor to the floor. If possible, leave an area around the tank free from any walls, obstacles, etc. This gives working space for connecting the foam system piping to/from the tank.

### **GENERAL INFORMATION**

Piping Materials: Standard schedule 40 black steel (when kept full of foam concentrate or a "dry pipe" system) and stainless steel pipe is suitable for use with Chemguard manufactured AFFF/AR-AFFF types of foam concentrates.

Galvanized pipe should not be used with any AFFF/AR-AFFF concentrates. AFFF's have a solvent in their formulation, which may dissolve standard pipe joint compound (pipe dope) normally used with plain water sprinkler systems. When installing a foam water fire protection system using AFFF concentrates, it is recommended where the concentrate or the solution is in contact with any pipe joints etc., a quality Teflon TM tape in accordance with MIL-T-27730 and a Telfon TM based pipe joining compound be used on all threaded fittings.

## ORDERING INFORMATION (STANDARD POLY TANK)

**Note:** All tanks come with the following:

- (1) Pressure/Vacuum Vent
- (1) Flanged Drain Valve
- (1) Flanged Suction Fitting
- (1) Flanged Return Fitting
- (1) Molded in Gallonage Marker

Part No.	Capacity (gal.)	Inspection Cover Size (in.)	Drain Valve Size	Height (in.)	Diameter (in.)
CAST100	100	7	1"	64	23
CAST200	205	7	1"	71	31
CAST350	385	17	1"	58	48
CAST495	495	17	1"	46	64
CAST600	615	17	1 ½"	88	48
CAST800	805	19	1 ½"	114	48
CAST900	905	19	1 ½"	76	64
CAST1000	1000	17	1 ½"	53	86
CAST1100	1100	17	1 ½"	82	73
CAST1300	1300	19	1 ½"	67	85
CAST1450	1450	16	1 ½"	73	86
CAST1550	1550	17	1 ½"	141	61
CAST1700	1700	17	1 ½"	115	73
CAST2000	2000	17	2"	89	89
CAST2400	2400	17	2"	152	73
CAST2550	2550	24	2"	120	85
CAST2850	2850	24	2"	127	90
CAST3000	3000	24	2"	140	85

**Select from the following the required tank suction and return fittings:**

**Suction:**

- S1 – 1 ½" Stainless steel flanged connection with PVC internal drop tube
- S2 – 2" Stainless steel flanged connection with PVC internal drop tube
- S3 – 3" Stainless steel flanged connection with PVC internal drop tube
- S4 – 4" Stainless steel flanged connection with PVC internal drop tube

**Return:**

- R1 – 1 ½" Stainless steel flanged connection with PVC internal drop tube
- R2 – 2" Stainless steel flanged connection with PVC internal drop tube
- R3 – 3" Stainless steel flanged connection with PVC internal drop tube
- R4 – 4" Stainless steel flanged connection with PVC internal drop tube

**An optional low-level switch is available. Specify option –LS when ordering.**

**Example:**

CAST 100-S1-R1-LS specifies 100-gallon tank with 1 ½" suction, 1 ½" return fittings and a low-level switch. Tank will come standard with Pressure/Vacuum Vent, Inspection Hatch, molded in gallonage marker and drain valve size listed in chart.

