



## TECHNICAL DATA

### ATMOSPHERIC FOAM CONCENTRATE STORAGE TANKS

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058

Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com

#### 1. DESCRIPTION

Standard 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.

#### 2. LISTINGS AND APPROVALS

N/A

#### 3. TECHNICAL DATA

##### Specifications:

Standard Optimum Operating Pressure: 100 PSI (7 bar)

See Table 1.

##### Material Standards:

Crosslinked Polyethelene PVC

##### Ordering Information:

See Table 1.

Viking Technical Data may be found on The Viking Corporation's Web site at <http://www.vikinggroupinc.com>. The Web site may include a more recent edition of this Technical Data Page.



#### 4. INSTALLATION

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.

If using a carbon or stainless steel tank with AFFF type foam concentrates, it is not recommended to line 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.

Any interconnecting piping, strainers, valves, etc. that are not specifically mentioned on any quotation or sales order are not supplied. When using AFFF or AR-AFFF type foam concentrates in any atmospheric type storage tank, it is recommended 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 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.

Standard schedule 40 black steel pipe is acceptable when kept full of foam concentrate, 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. AFFFs 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® tape in accordance with MIL-T-27730 and a Telfon® based pipe joining compound be used on all threaded fittings.

#### 5. OPERATION

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 (2 °C - 49 °C). All tanks offered by Chemguard are suitable for use with Chemguard manufactured and supplied foam concentrates.

#### 6. INSPECTIONS, TESTS AND MAINTENANCE

**NOTICE:** The owner is responsible for maintaining the fire protection system and devices in proper operating condition. For minimum maintenance and inspection requirements, refer to recognized standards such as those produced by NFPA, LPC, and VdS, which describe care and maintenance of sprinkler systems. In addition, the "Authority Having Jurisdiction" may have additional maintenance, testing, and inspection requirements that must be followed.

**WARNING: ANY SYSTEM MAINTENANCE OR TESTING THAT INVOLVES PLACING A CONTROL VALVE OR DETECTION**



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SYSTEM OUT OF SERVICE MAY ELIMINATE THE FIRE PROTECTION CAPABILITIES OF THAT SYSTEM. PRIOR TO PROCEEDING, NOTIFY ALL AUTHORITIES HAVING JURISDICTION. CONSIDERATION SHOULD BE GIVEN TO EMPLOYMENT OF A FIRE PATROL IN THE AFFECTED AREA.

### 7. AVAILABILITY

Viking Foam Products are available through a network of domestic and international distributors. See the Viking web site for the closest distributor or contact The Viking Corporation.

### 8. GUARANTEE

For details of warranty, refer to Viking's current list price schedule or contact Viking directly.

**Table 1: Specifications**

Viking Part No.	Chemguard Model Number	Capacity (gal.)	Inspection Cover Dia.	Drain Valve Dia.	Height	Tank Diameter
F15360	CAST100	100	7"	1"	67"	23"
F15361	CAST200	205	7"	1"	74"	31"
F15362	CAST300	300	7"	1"	59"	42"
F15363	CAST400	400	7"	1"	63"	45"
F16256	CAST540	540	17"	1"	82"	48"
F15364	CAST600	615	17"	1-1/2"	93"	48"
F15365	CAST800	805	17"	1-1/2"	119"	48"
F15366	CAST900	905	17"	1-1/2"	81"	64"
F15367	CAST1050	1050	17"	1-1/2"	56"	86"
F15368	CAST1150	1150	17"	1-1/2"	98"	64"
F15370	CAST1450	1400	17"	1-1/2"	120"	64"
F15371	CAST1550	1550	17"	1-1/2"	141"	61"
F15372	CAST1700	1700	17"	1-1/2"	115"	73"
F15373	CAST2000	2000	17"	2"	102"	85"
F16257	CAST2250	2250	24"	2"	93"	96"
F15375	CAST2550	2550	24"	2"	124"	85"
F16258	CAST2650	2650	24"	2"	105"	96"
F15377	CAST3000	3000	24"	2"	140"	85"
F16259	CAST3650	3650	24"	2"	101"	122"
F16260	CAST3900	3900	24"	2"	153"	94"
F16261	CAST4150	4150	24"	2"	84"	143"
F16262	CAST4925	4925	24"	2"	143"	108"
F16263	CAST5050	5050	24"	2"	192"	94"
F16264	CAST5300	5300	24"	2"	154"	110"
F16265	CAST6100	6100	24"	2"	196"	102"
F16266	CAST7300	7300	24"	2"	170"	122"

**Table 2: Accessories**

Viking Part Number	Description	Material	Size
F15378	Tank Suction Connection	Stainless Steel	1-1/2"
F15379			2"
F15380			3"
F15381			4"
F15382	Tank Return Connection	Stainless Steel	1-1/2"
F15383			2"
F15384			3"
F15385			4"
F15386	Pressure/Vacuum Vent	Polypropylene	2"
F15387		Stainless Steel	2"
F15388			3"
F15389	Low Level Switch	--	--
F16254	Flexible Connection	Zinc Plated Flanges	1-1/2"
F16255			2"
F16301			3"
F16302			4"

**Ordering Information (Standard Poly Tank)**

Each tank includes the following:

(1) Flanged Drain Valve

(1) Molded in Volume Gauge (US Gallons)

Specify Tank Size, Suction Size, Return Connection Size and Level Switch, if required.



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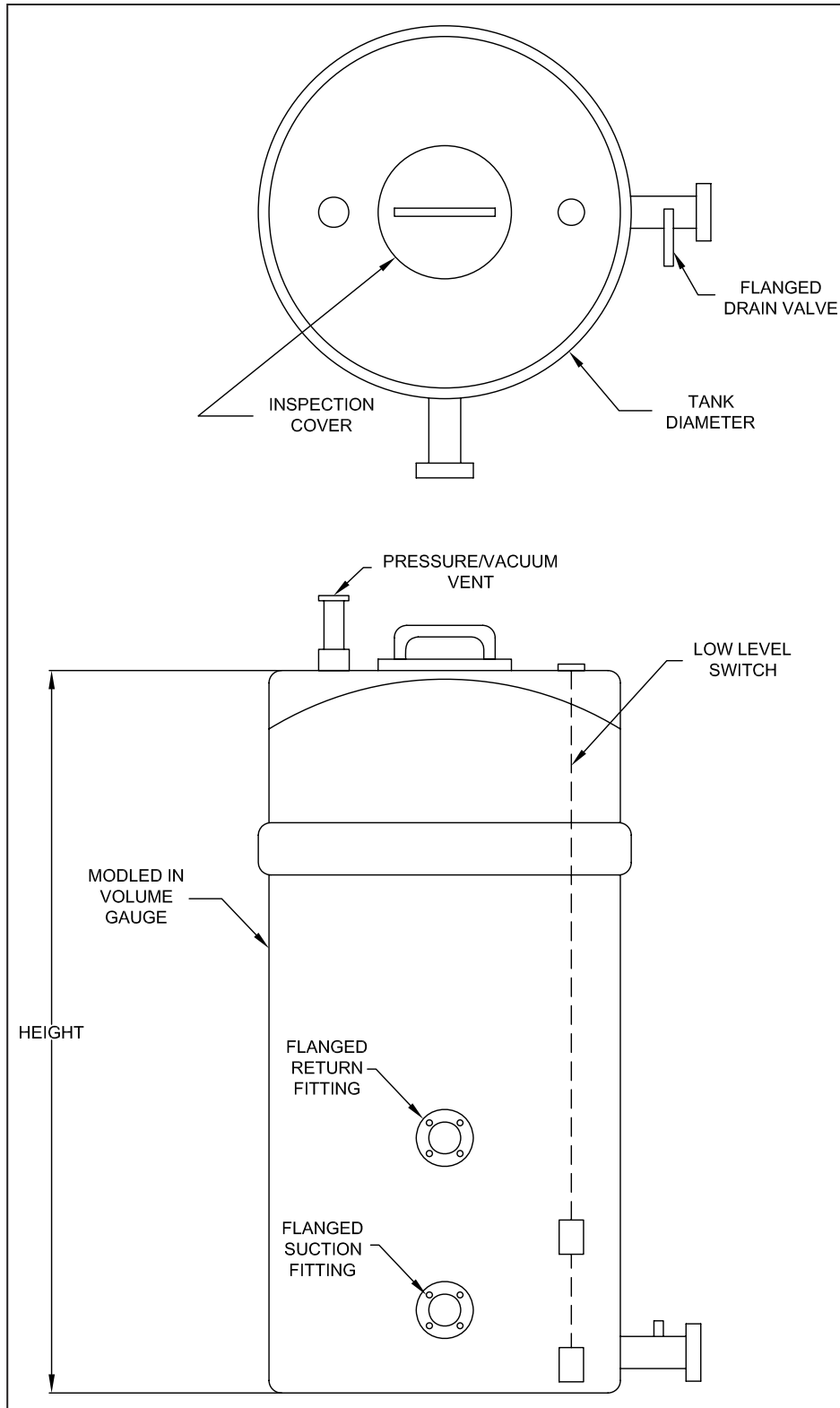


Figure 1

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