

Cemline Steel Tanks



Carbon Steel, Stainless Steel, Galvanized Steel, Copper
A.S.M.E. Code, Non-Code



CEMLINE CORPORATION

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www.cemline.com

Cemline® Steel Tanks Construction and Design



Vessel with Removable Top



Vertical Steel Tank with Angle Legs

Cemline manufactures tanks and pressure vessels to suit customer requirements. Tanks are custom fabricated as to size, working pressure, and openings. We can build any tank to whatever configuration is specified. For more information about Cemline products, contact the factory or our representative.

Standard Steel Tank Package

Features

- Sizing** Cemline tanks are manufactured in a wide range of sizes. Tank diameter is measured over the outside of the head and length refers to the overall tank length.
- Construction** Cemline steel tanks are manufactured in strict accordance with A.S.M.E. Code requirements and National Board Registration. Non-Code tanks are also available.
- Material** Cemline tanks are normally constructed of pressure vessel quality carbon steel. Stainless Steel in grades 304 or 316 and 90:10 Cupro-Nickel can be furnished. Consult factory for other materials.
- Working Pressure** Cemline steel tanks can be built in accordance with working pressures designed to suit particular jobs. Tanks are usually built for 125 psig working pressure, but we are able to provide tanks with working pressure from 0 to 500 psig.
- Connections** NPT threaded openings are furnished. Tanks are built with the location and size of the openings to suit customer requirements. Flanged openings are normally ANSI standard for 150#, 300#, 600#, and specially drilled flanges can be furnished.
- Manhole** Cemline steel tanks are provided with 12" x 16" elliptical manholes on 42" diameter and larger as required by the A.S.M.E. Code. Smaller tank diameters do not require a manhole, but manhole or handhole can be provided if so specified. (Other manhole and handhole sizes are available and can be furnished upon request.)
- Exterior** Cemline steel tanks are normally furnished with factory primed exterior. Special paints and coatings are available upon request.
- Galvanizing** Cemline tanks through 60" diameter can be hot dip galvanized at customer request.
- Paint Coatings** Cemline tanks can be furnished with interior or exterior coated to customer specifications. Cemline can provide epoxy linings to meet customer requirements.

Send Cemline your requirements for a prompt quotation.

Steel Tanks Gallon Capacities



Vertical Tank with Angle Legs and Multiple Flanged Openings.



Horizontal Tank with Stand.

The dimensions below are for Cemline steel tanks and are actual capacities in gallons.

Length	Capacity Gallons															
	Diameter															
	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"	54"	60"	66"	72"	84"	96"
2'	11	14	20	22	28	40										
3'	17	22	30	35	44	63										
4'	23	30	40	48	60	87										
5'	30	38	50	61	76	110	170	240	320	410	510	590	740	785	1140	1440
6'	35	46	60	74	92	135	205	290	390	500	620	740	910	1010	1420	1820
7'	41	54	70	87	108	155	245	340	460	590	730	890	1080	1235	1700	2200
8'	47	62	80	100	124	180	280	395	530	680	850	1040	1250	1460	1980	2580
9'						200	315	445	600	770	970	1190	1420	1685	2260	2960
10'						220	350	495	670	860	1085	1330	1595	1880	2540	3340
11'						250	385	545	740	955	1200	1470	1775	2080	2820	3720
12'						265	425	605	810	1050	1310	1610	1940	2280	3105	4090
13'						292	465	650	880	1140	1430	1760	2110	2480	3380	4460
14'						315	500	700	950	1235	1550	1905	2290	2700	3660	4840
15'							535	750	1020	1320	1660	2040	2460	2900	3940	5220
16'							570	800	1090	1410	1780	2190	2630	3100	4220	5590
17'									1160	1500	1900	2330	2800	3325	4500	5960
18'									1230	1590	2015	2475	2980	3520	4780	6340
19'										1680	2130	2620	3150	3720	5060	6720
20'										1770	2240	2760	3320	3920	5340	7090
21'											2360	2910	3500	4140	5620	7460
22'											2470	3060	3670	4340	5900	7840
23'												3210	3840	4550	6180	8220
24'												3360	4010	4750	6460	8590
25'													4180	4960	6740	8960



Cemline steel tanks awaiting shipment.

Tanks



Rectangular
Non-pressurized
Tank.

Cemline steel tanks are available in working pressure from 0# to 500# psi. Normally steel tanks are furnished for 125# working pressure. Openings, both threaded and flanged, can be located in the tank to suit the requirement of the application. Typical uses are shown below.

Types

Uses

- Chilled Water Buffer Tanks** Designed to be used with chillers which do not have water volume of sufficient size in relation to the chiller. The CWB adds volume to buffer the system against poor temperature control, erratic system operation, and excessive compressor cycling.
- System Efficiency Buffer Tanks**..... Used with hydronic heating systems. The SEB improves efficiency of the heating system by adding volume to the system preventing short cycling and nuisance shut downs. It eliminates the need for an air separator, while acting as a primary/secondary hydraulic separator in the system.
- Flash Tanks** Flash tanks are used to flash steam from condensate from high pressure systems prior to introducing into low pressure lines and to flash condensate prior to returning to the boiler or condensate tank.
- Condensate Tanks** Condensate tanks are used in steam systems to store condensate until it is needed to be returned to the boiler.
- Blow Down Tanks**..... Blow Down tanks are used to receive blow-off from boilers and allow it to cool before the blow down is discharged into the sewer system.
- Expansion-Compression Tanks**..... Hydronic Heating Systems
- Air Receiver Tanks** Air storage in air systems.
- Unfired Steam Generators**..... Generate steam from steam or high temperature hot water.
- Storage Tanks** Storage of liquids, gases or solids.
- Hoppers** For mixing and storage of solids or liquids.
- Tanks for Special Uses** To suit customer requirements.
- Rectangular Tanks** Custom rectangular tanks to meet customer requirements.

Any of the above tanks can be supplied in Carbon Steel, Stainless Steel, Galvanized Steel, or Copper Nickel.
Non-pressure tanks are also available.

Flash and Blow Down Tanks

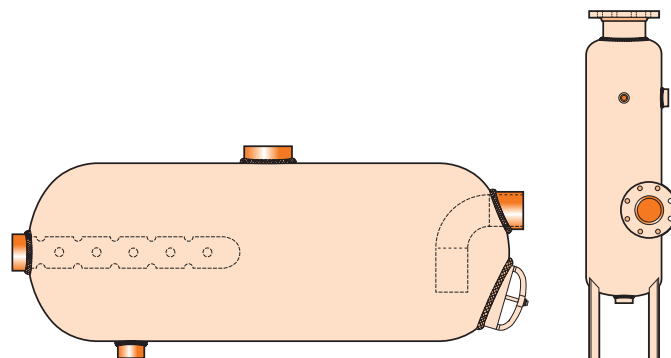


Pressure Tank with Conical Bottom.

Cemline manufactures a variety of flash and blow down tanks which are described in detail in separate brochures. Request brochures from your local representative or contact Cemline.

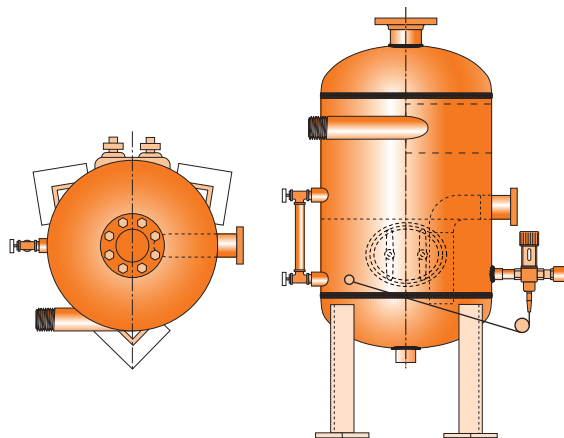
Flash Tanks

Request Cemline "FST Series" brochure.



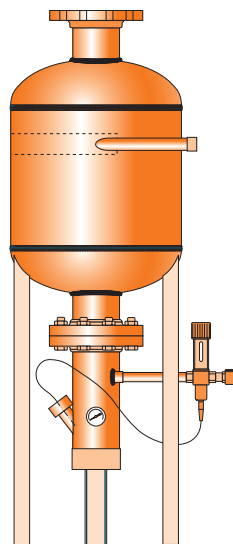
Blow Off Tanks

Request Cemline "BOT Series" brochure.



Centrifugal Blow Off/ Condensate Cooler

Request Cemline "CBO Series" brochure.

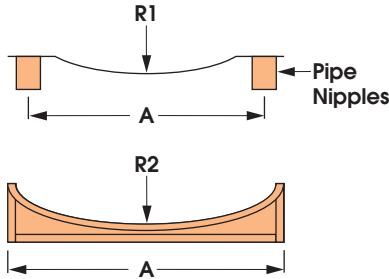


Tank Supports



Cemline offers a variety of supports for both horizontal and vertical tanks. Standard supports are shown below.

Saddles



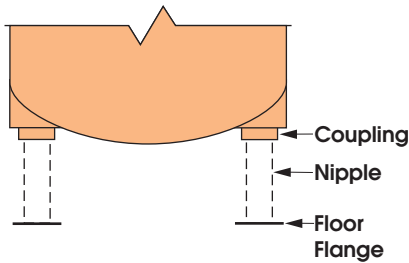
24" through 36"
R1 = Tank radius (1/2 diameter)

42" through 96"
R2 = Tank radius (1/2 diameter)

Dia.	"A"	Dia.	"A"
24"	22"	54"	22"
30"	24"	60"	24"
36"	26"	66"	28"
		72"	30"
42"	18"	84"	42"
48"	20"	96"	42"

Note:
Normally two saddles are used on tanks up to 16' length.
Three saddles over 16' tank length.

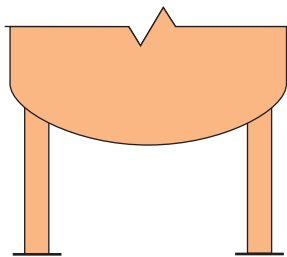
Supports for Pipe Legs



Most popular type of vertical support—Allows installer to level to fit floor by adjusting pipe nipples.

Tank Diameter	Coupling Size	Number of Flanges
12" - 20"	1"	3
24" - 36"	1 1/2"	3
42"	2"	4
48"	2"	4
54" - 60"	2 1/2"	4
72" - up	3"	4

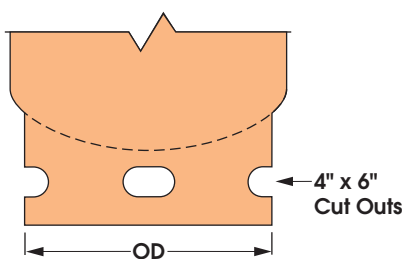
Angle Legs



Tanks can be furnished with three or four angle legs.

Tank Diameter	Angle Size	Number of Legs
24" - 30"	1 1/2" x 1 1/2" x 3/16"	3
36"	2" x 2" x 1/4"	3
42" - 48"	3" x 3" x 1/4"	4
54" - 60"	3" x 3" x 1/4"	4
66" - up	4" x 4" x 1/4"	4

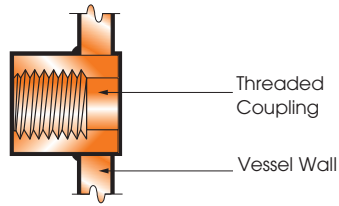
Ring Base



Normally used with air receivers—not recommended for water tanks as external corrosion can occur in ring.

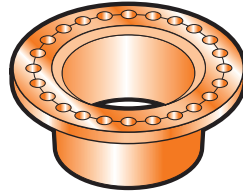
Note:
Outside diameter of ring is 6" less than diameter of tank.

Openings in Tanks



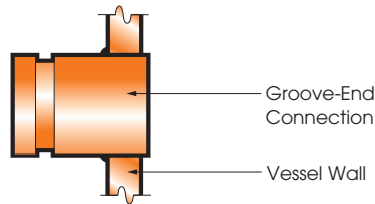
Threaded Openings

NPT (National Pipe Thread) openings are available from 1/4" through 3". Normally openings above this size are flanged.



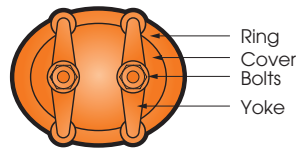
Flanged Openings

Flanged openings are available from 1" through 24". Normally ANSI Standard flanges are 150# rating. Flanged openings of other styles and pressures are available.



Groove-End Connections

Groove-end connections are furnished as required. 6" and below are schedule 40 pipe, 8" and above are schedule 30 pipe.



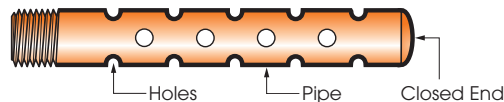
Manholes and Handholes

Manholes are furnished in the following sizes:

12" x 16" 14" x 18"

Handholes are furnished in the following sizes:

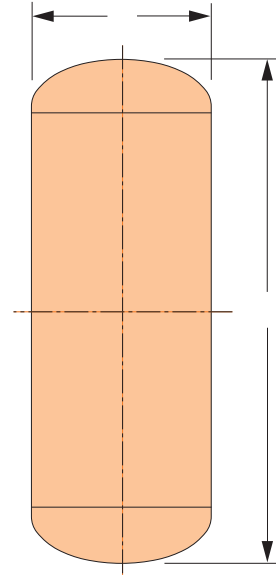
4" x 6" 6" x 8"



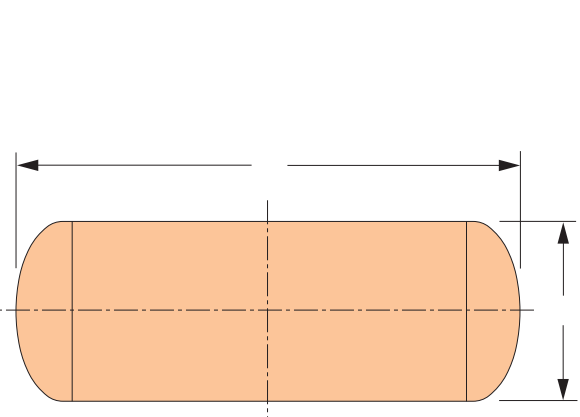
Internal Pipes

Internal pipes and perforated pipes in all sizes can be furnished.

Vertical Submittal



Horizontal Submittal

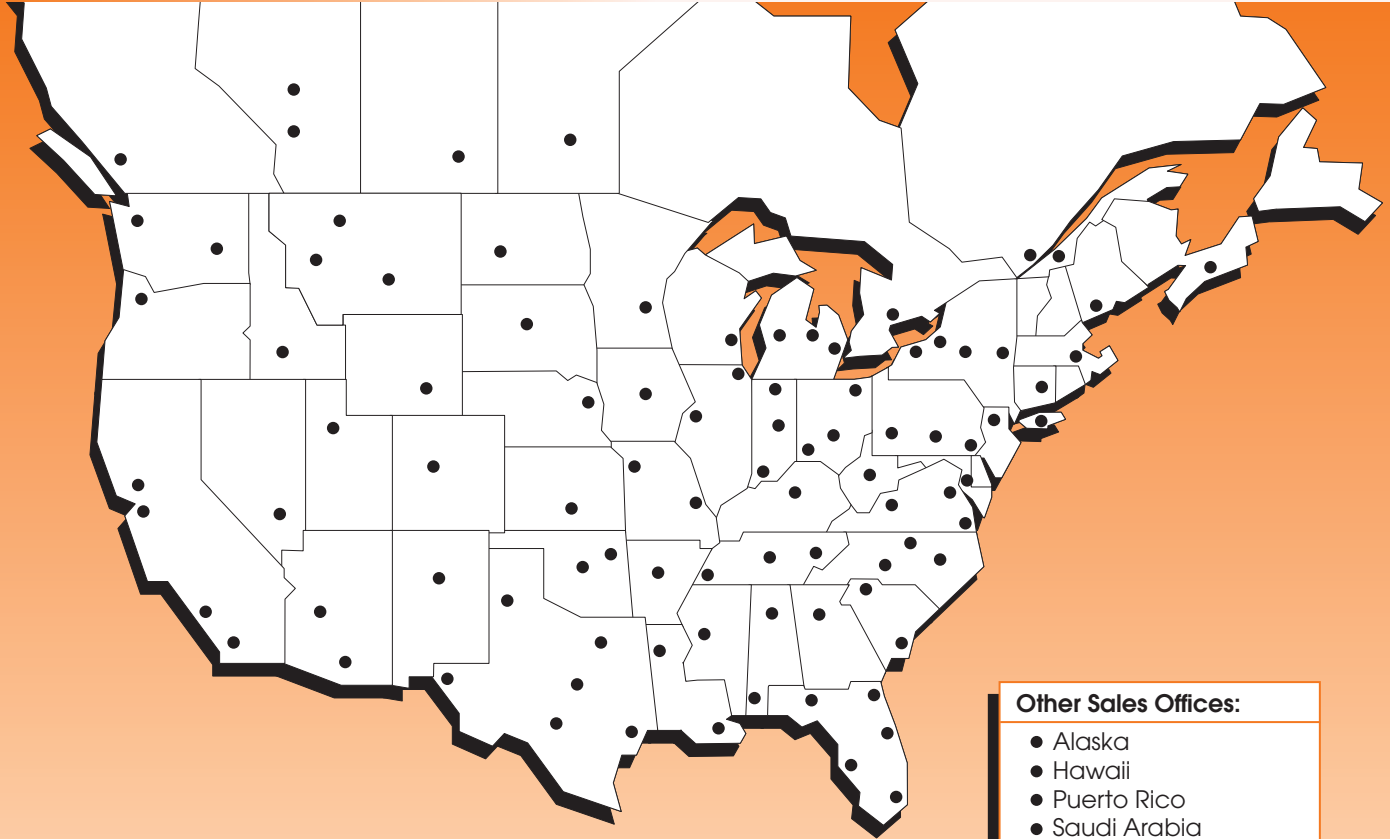




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Sales Offices



Other Sales Offices:

- Alaska
- Hawaii
- Puerto Rico
- Saudi Arabia
- Taiwan
- U.A.E.

Available Cemline Brochures



- www.cemline.com
- Product Sizing Programs
 - Brochures
 - I.O.M. Manuals
 - Drawings & Specifications
 - Agent Locator
 - Plant Tour

- STONESTEEL®
 - Water Storage Tanks
 - Jacketed Storage Tanks
 - Commercial Electric and Packaged Copper Coil Water Heaters
- Submerged Heating Coils
- Replacement Tube Bundles
- Steel Tanks
- Chilled Water Buffer Tanks
- System Efficiency Buffer Tanks
- Electric Boilers
- Stainless Compact Packaged Copper Coil Water Heaters - Semi-instantaneous, Instantaneous
- Unfired Steam Generators
- Condensed Catalog

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