

# STORAGE TANKS

## **HEAVY-DUTY LARGE VOLUME STORAGE TANKS MODEL HD CUSTOM BUILT**

Large volume tanks are designed for storing potable water.

### **FEATURES**

### SIZES FROM 120 TO 4,000 GALLONS

All tanks are constructed to the requirements of the ASME Code. These ASME Code tanks are available at 125 and 150 PSI working pressure. Consult factory for tanks with special configurations.

### LINING AND COATINGS

Each lining and coating has particular capabilities and limitations. Thorough investigation on the service life of steel tanks with protective coatings or linings has led to the recommendation of the following linings:

- Glass Lined All internal surfaces exposed to water are glass lined per ASME HLW Code procedures.
- Cement Lined Cement lining consists of a specially formulated cement applied over the interior of the vessel. Cement lined tanks are recommended when storing water at 180°F or higher.
- Epoxy Lined The application of specially formulated epoxy makes this lining suitable for cold or hot water storage

Please consult the factory for recommendations on the uses of linings for specific applications. All tanks receive one prime coat of paint on external surface.

### CATHODIC PROTECTION

Glass lined and epoxy tanks are furnished with anodes designed for maximum protection.

### **CUSTOM TANK OPENINGS**

All tanks will be supplied with the fittings located as indicated on the drawings unless specified otherwise. Custom tank opening sizes and locations can be provided to your specification.

### INSPECTION OPENINGS

- 4"x 6" handhole are available as options
- Two 2" ASME inspection openings are standard on tanks 36" diameter and below
- 12"x16" manway is standard on tanks with 42" diameters and above, and optional on 30" and 36" diameter tanks

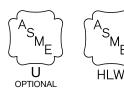
### **TANK OPTIONS**

- Manway/ Handholes
- Additional / Custom Tank Openings
- Lifting Lugs
- **Horizontal Tank Saddles**
- Factory Jacketing and Insulation
- **Tube bundles**
- Controls to create a custom Hot Water Generator
- Controls to create a custom Hot Water Generator, w T&P Valve
- T & P Valve
- Cement and Epoxy Linings

Attention: Significant changes have been made to some models. Please note that this spec sheet refers specifically to models manufactured in Lebanon, TN

**MODELS** HD-20-120 THROUGH HD-72-4000









### STORAGE TANK SELECTION

Model Number	Gallons	Dimensions			Shipping Weight (lbs.)			
		Diameter	Vertical Height	Horizontal Length	125 psi	150 psi	Cement Lined	
HD*24-120A	118	24"	64"	60"	368	368	-	
HD*24-140A	141	24"	76"	72"	428	428	-	
HD*24-200A	188	24"	100"	96"	556	556	-	
HD*24-250A	235	24"	124"	120"	684	684	-	
HD*28-175A	175	28"	65"	-	353	353	-	
HD*28-200A	200	28"	76"	-	488	488	-	
HD*30-150A	147	30"	52"	48"	400	400	695	
HD*30-185A	184	30"	64"	60"	468	468	812	
HD*30-220A	220	30"	76"	72"	548	548	958	
HD*30-250A	257	30"	87"	83"	628	628	1,103	
HD*30-300A	294	30"	100"	96"	701	701	1,242	
HD*30-375A	367	30"	124"	120"	868	868	1,540	
HD*36-275A	265	36"	64"	60"	577	577	995	
HD*36-325A	318	36"	76"	72"	673	673	1,173	
HD*36-400A	370	36"	87"	83"	770	770	1,343	
HD*36-425A	423	36"	100"	96"	866	866	1,513	
HD*36-500A	528	36"	124"	120"	1,058	1,058	1,861	
HD*42-450A	432	42"	76"	72"	795	909	1,385	
HD*42-500A	504	42"	88"	84"	908	1,050	1,587	
HD*42-600A	576	42"	100"	96"	1,020	1,190	1,790	
HD*42-900A	864	42"	148"	144"	1,470	1,751	2,601	
HD*42-1000A	1,008	42"	172"	168"	1,695	2,031	3,006	
HD*48-500A	500	48"	73"	69"	1,062	1,062	1,856	
HD*48-700A	658	48"	88"	84"	1,346	1,346	2,124	
HD*48-750A	752	48"	100"	96"	1,507	1,507	2,392	
HD*48-950A	940	48"	124"	120"	1,828	1,828	2,918	
HD*48-1150A	1,128	48"	148"	144"	2,150	2,150	3,444	
HD*48-1300A	1,315	48"	172"	168"	2,471	2,471	3,970	
HD*48-1500A	1,503	48"	196"	192"	2,793	2,793	4,505	
HD*54-1000A	951	54"	100"	96"	1,721	1,972	2,729	
HD*54-1200A	1,189	54"	124"	120"	2,083	2,423	3,320	
HD*54-1450A	1,427	54"	148"	144"	2,451	2,881	3,919	
HD*54-1700A	1,665	54"	172"	168"	2,807	3,326	4,511	
HD*54-1900A	1,903	54"	196″	192"	3,168	3,777	5,102	
HD*54-2150A	2,141	54"	220"	216"	3,530	4,228	5,701	
HD*60-1500A	1,469	60"	124"	120"	2,784	3,221	4,177	
HD*60-1750A	1,763	60"	148"	144"	3,267	3,823	4,913	
HD*60-2000A	2,056	60"	172"	168"	3,749	4,425	5,658	
HD*60-2400A	2,350	60"	196″	192"	4,231	5,026	6,394	
HD*60-2650A	2,644	60"	220"	216"	4,713	5,628	7,130	
HD*72-2100A	2,115	72"	124"	120"	3,416	3,904	5,104	
HD*72-2500A	2,538	72"	148"	144"	3,995	4,627	5,995	
HD*72-3000A	2,961	72"	172"	168"	4,575	5,350	6,885	
HD*72-3400A	3,384	72"	196″	192"	5,154	6,073	7,767	
HD*72-4000A	3,807	72"	220"	216"	5,733	6,795	8,658	

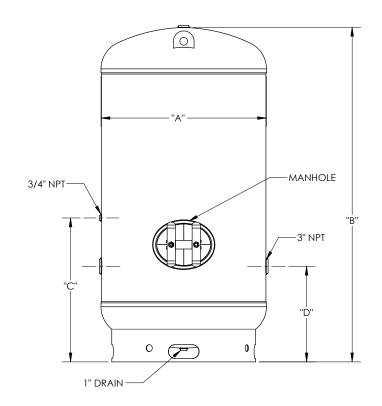
For Jacketed models, the J will follow the orientation: HDVJ48-1500A. For foam insulation, O represents Outdoor: HDV048-1500A

For linings other than glass, use the suffix after the number and the A - HDHJ42-1000AE for and Epoxy lined or HDHJ42-100AC for Cement lined. U = Unlined.

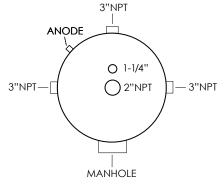
For 150 PSI ASME working pressure, insert M at the end - HDV42-1000AM

Specify Horizontal or Vertical installation H or V (after the HD)  $^{\star}$  For Horizontal e.g. (HDH48-1500A) or Vertical e.g. (HDV48-1500A)





Diameter	С	D		
24	16.75	11		
28	17.375	11.62		
30	31.875	15.875		
36	33.375	17.375		
42	34.875	18.875		
48	36.875	20.875		
54*	38.375	22.375		
60	39.875	24.5		
72	42.375	27		



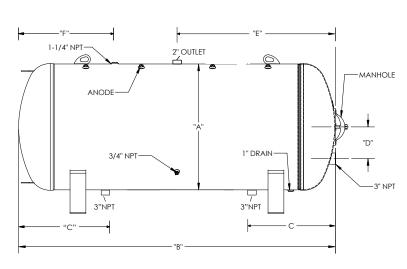
Alt. Flange Sizes (A or B appings) Pipe Diameter			
3″			
4"			
5″			
6"			
8"			
10"			
12"			
Additional Tappings NPT			
1"			
1-1/4"			
1-1/2"			
2"			
2-1/2"			

3" 4"

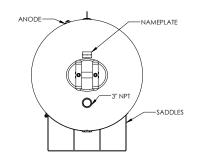
### NOTE:

SPECIFY FOR HORIZONTAL OR VERTICAL INSTALLATION.

2 each 2" ASME inspection openings are standard on tanks 36" diameter and below. 12"x16" ASME inspection openings are standard on tanks with 42" diameters and above.



Diameter	С	D
24	24.625	6
30	26.5	6
36	28	12
42	29.5	12
48	31.5	12
54	33	12
60	34.5	12
72	37	12

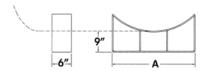


Alt. Flange Sizes (A or B appings) Pipe Diameter
3"
4"
5"
6"
8"
10"
12"
Additional Tappings NPT
Additional Tappings NPT
1"
1" 1-1/4"
1" 1-1/4" 1-1/2"
1" 1-1/4" 1-1/2" 2"

### TANK SADDLE DIMENSIONS

### Tank Diameter 30 36 42 48 54 60 72

A 21" 25" 29" 34" 48" 52" 62"



**NOTE:** Alternate saddle heights are available. (Consult factory)

### **TANK SADDLES**

A.O. SMITH PART NO.	SADDLE DESCRIPTIONS
100170345	SADDLE,TANK,24",9"CLR,P-1
100170349	SADDLE,TANK,30",9"CLR,P-1
100170338	SADDLE,TANK,28",9"CLR,P-1
100170352	SADDLE,TANK,36",9"CLR,P-1
100170355	SADDLE,TANK,42",9"CLR,P-1
100170358	SADDLE,TANK,48",9"CLR,P-1
100170361	SADDLE,TANK,54",9"CLR,P-1
100170365	SADDLE,TANK,60",9"CLR,P-1
100170371	SADDLE,TANK,72",9"CLR,P-1

### **FACTORY INSULATION OPTIONS**

**Factory Jacketed and Insulation** 

- INSULATION Entire tank is surrounded with insulation.
- CABINET Heavy gauge painted steel.
- Adds 4" to the round jacketed and 6" to the square jacketed diameter of the tank.



### **OUTDOOR FOAM INSULATION**

- INSULATION Entire tank is sprayed with minimum of 2" high-density polyurethane foam insulation that forms a watertight jacket that is approved for outdoor use.
- Adds 4" to the diameter of the tank, and 2" to the height.

Note: Minimum foam insulation thickness is 2"; however, since tank is hand sprayed, insulation thicknesses may be greater in some areas giving the finished tank an uneven but watertight surface.

### SUGGESTED SPECIFICATION

### SAMPLE SPECIFICATION FOR CUSTOM-LINE STORAGE TANKS

When jacketed or insulated these models meet or exceed the thermal efficiency and standby loss requirements of ASHRAE 90.1b (current standard).

ASME storage tank to be A. O. Smith Cus	tom-Line model	Capacity to be	gallons with a	a diameter of	inches. Tank(s) shall b	e constructed and
stamped according to ASME specifications	forpsi working pr	essure. Manhole (12"x10	6"), handhole (4x6) or	inspection openings (	2-2") shall be installed	in accordance with
ASME code requirements and manufactur	er(s) standard practice. Tank	to be constructed of (ca	rbon steel)	. Lining shall be (glass	, epoxy, cement)	Tank(s
lined with (glass, cement, epoxy)	lining shall be equipped	with the number and size	ze of anode rod(s) suf	ficient to provide adeo	quate protection for th	e tank lining. Tanl
shall be (vertical, horizontal)	design and provided with	n (four)	ing base.	saddles.		

For technical information, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.