

## JACKETED AND INSULATED TANKS

Job Name
Location
Engineer
Wholesaler
Mech. Contractor
Model No
Tank Construction
Working Pressure
Dimensions
Notes

#### **Standard Features:**

5 Year Limited Warranty

- Magnesium Anode •
- PERMAGLAS® lining •
- ASME Certified •

#### **Optional Equipment:**

□ 150 PSI for some models, please check the spec sheet for details

- **D** Export Configuration
- **U** Code Certification



# Commercial Storage Tanks

# FACTORY JACKETED AND INSULATED STORAGE TANKS

Large volume tanks are designed for storing potable water.

### FEATURES

**STANDARD SIZES** – From 140 to 2,500 gallons - A. O. Smith stocks vertical factory jacketed and insulated tanks from 140 gallons up to 1,000 gallons for fast delivery and retrofit applications. All stock tanks are glasslined with standard tank openings as shown on following pages. For custom or larger capacities, see our custom line tanks or consult your factory representatives.

**ASME CODE CONSTRUCTION -** All tanks are constructed to the requirements of the ASME. ASME code tanks are available in 125, 150 or 160 psi working pressures (125 psi working pressure standard on tanks 500 gallons and above, 160 psi standard on tanks below 500 gallons). Consult factory for tanks with greater or lesser working pressures, with special configurations. Please check the tables below for specific working pressures - standard and optional.

**INSULATION** - Entire tank is insulated to meet ASHRAE 90.1 (current edition). Depth of insulation cavity requires use of remote bulb-type tank temperature control and thermometer. Storage tanks meet R12.5 minimum thermal insulation requirements of NRCan and current edition of ASHRAE/IESNA 90.1.

**CABINET** - Heavy gauge steel with high quality paint.

**LININGS AND COATINGS** - Thorough investigation on the service life of steel tanks with protective coatings or linings has led to the recommendations of the following lining:

 Glasslined - These are normally stocked tanks for water storage up to 180°F, with glass lining to prevent corrosion and addition of rust to water. The glass lining was developed over many years of ceramic research for a wide variety of conditions.

CATHODIC PROTECTION - Tanks are furnished with anodes designed for maximum protection.

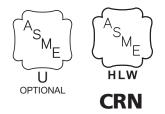
**ACCESSORIES** - Tanks will be supplied with the fittings located as indicated on the drawings unless specified otherwise. A 12" X 16" manhole or 4" x 6" handhole is optional on tanks 36" diameter or less.

#### MODELS TJV AND TJH

Smith

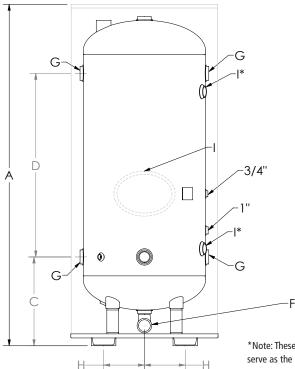
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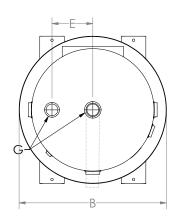






**STORAGE TANK SELECTION** TJV-140 THRU TJV-400 FIGURE 1.





\*Note: These connections are not for piping connections. They are the anode locations and also serve as the required ASME 2" inspection openings.

**NOTE:** Inspection openings i.e., 4" x 6" handholes and 12" x 16" manholes, are optional on diameters 36" and below and are to be included with tanks only when specified.

- Other tanks to 72" diameter and 3500 gallon are available on special order.
- All openings Female Pipe Thread except as noted.
- "F" opening Male Pipe Thread.

MODEL NUMBER	DIMENSIONS IN (CM)							"I" ASME INSPECTION	
	А	В	с	D	E	F	G	н	OPENINGS
TJV-140A	87 (221)	30 (76)	21-1/2 (55)	51 (130)	8 (20)	1-1/2	2-1/2	6-3/8 (16)	2″
TJV-200A	83 (211)	36 (91)	22 (56)	45 (114)	10 (25)	1-1/2	2-1/2	7-3/4 (20)	2″
TJV-250A	96 (244)	36 (91)	22 (56)	58 (147)	10 (25)	1-1/2	2-1/2	7-3/4 (20)	2″
TJV-350A	97 (246)	42 (107)	24-1/2 (62)	54 (137)	14 (36)	1-1/2	2-1/2	9-1/2 (25)	2″
TJV-400A	105 (267)	42 (107)	24-1/2 (62)	61 (155)	14 (36)	1-1/2	2-1/2	9-1/2 (25)	2″

Working pressure 160 psi.



### DIMENSIONS AND SPECIFICATIONS FOR VERTICAL TANKS

#### VERTICAL ROUND JACKETED ASME

	TANK Capacity			
А	В	С	D	USG (L)
91 (231)	46 (117)	20-7/8 (53)	2″	500 (1,893)
77 (196)	52 (132)	22-7/8 (58)	2″	500 (1,893)
88 (224)	52 (132)	22-7/8 (58)	2″	600 (2,271)
97 (246)	52 (132)	22-7/8 (58)	2″	700 (2,650)
100 (254)	52 (132)	22-7/8 (58)	2″	750 (2,839)
124 (315)	52 (132)	22-7/8 (58)	2″	1000 (3,785)
	91 (231) 77 (196) 88 (224) 97 (246) 100 (254)	A B   91 (231) 46 (117)   77 (196) 52 (132)   88 (224) 52 (132)   97 (246) 52 (132)   100 (254) 52 (132)	91 (231) 46 (117) 20-7/8 (53)   77 (196) 52 (132) 22-7/8 (58)   88 (224) 52 (132) 22-7/8 (58)   97 (246) 52 (132) 22-7/8 (58)   100 (254) 52 (132) 22-7/8 (58)	A B C D   91 (231) 46 (117) 20-7/8 (53) 2"   77 (196) 52 (132) 22-7/8 (58) 2"   88 (224) 52 (132) 22-7/8 (58) 2"   97 (246) 52 (132) 22-7/8 (58) 2"   100 (254) 52 (132) 22-7/8 (58) 2"

Working pressure 125 psi standard on all models 500 gallons and above. 150 psi is an available option.

#### VERTICAL SQUARE JACKETED ASME

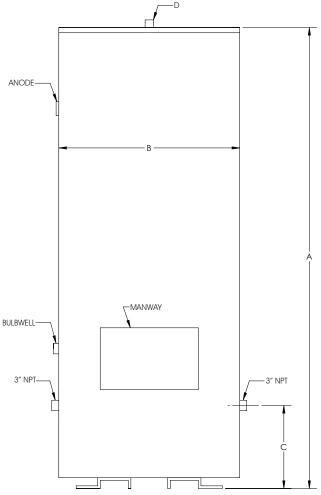
MODEL NUMBER		TANK CAPACITY			
	А	В	С	D	USG (L)
TJV-1250A	133 (338)	60 (152)	24-3/8 (62)	3″	1,250 (4,732)
TJV-1500A	129 (328)	66 (168)	25-7/8 (66)	3″	1,500 (5,678)
TJV-1750A	153 (389)	66 (168)	25-7/8 (66)	3″	1,750 (6,624)
TJV-2000A	126 (320)	78 (198)	28-3/8 (72)	3″	2,000 (7,571)
TJV-2500A	146-1/2 (372)	78 (198)	28-3/8 (72)	3″	2,500 (9,464)

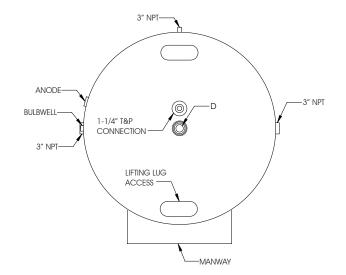
NOTE: Inspection openings, i.e., handholes and manholes, are optional and are to be included with tanks only when specified.

• All openings Female Pipe Thread except as noted.

#### OPTIONAL

- 4"x 6" handhole or 12" x 16" manhole on vessels 36" in diameter or less.
- Additional openings







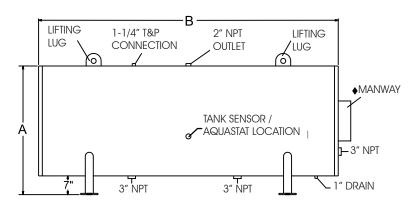
All openings are shipped open and unused. Openings must be plugged or capped at time of installation except as noted.



### DIMENSIONS AND SPECIFICATIONS FOR HORIZONTAL TANKS

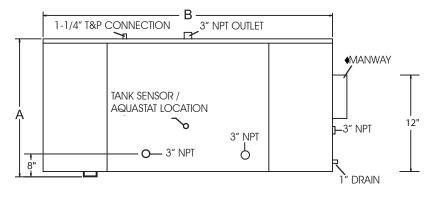
#### HORIZONTAL ROUND JACKETED ASME TANKS

MODEL NUMBER		NSIONS (CM)	DIAMETER	TANK CAPACITY
	А	В		USG (L)
TJH-250A	41 (104)	87 (221)	34 (86)	250 (946)
TJH-300A	47 (119)	76 (193)	40 (102)	300 (1,136)
TJH-400A	53 (135)	76 (193)	46 (117)	400 (1,514)
TJHT-500A	53 (135)	87 (221)	46 (117)	500 (1,893)
TJH-500A	59 (150)	77 (196)	52 (132)	500 (1,893)
TJH-600A	59 (150)	88 (224)	52 (132)	600 (2,271)
TJH-700A	59 (150)	97 (246)	52 (132)	700 (2,650)
TJH-750A	59 (150)	100 (254)	52 (132)	750 (2,839)
TJH-1000A	59 (150)	124 (315)	52 (132)	1,000 (3,785)



#### HORIZONTAL SQUARE JACKETED ASME TANKS

MODEL	DIMEN IN (		DEPTH	TANK CAPACITY	
NUMBER	А	В	DEFIN	USG (L)	
TJH-1250A	68-1/2 (174)	134 (340)	60-1/4 (153)	1,250 (4,732)	
TJH-1500A	74-1/2 (189)	127 (323)	66-1/4 (168)	1,500 (5,678)	
TJH-2000A	86-1/2 (220)	127 (323)	78-1/4 (199)	2,000 (7,571)	
TJH-2500A	86-1/2 (220)	144 (366)	78-1/4 (199)	2,500 (9,464)	



#### LIMITED WARRANTY OUTLINES

GLASSLINED: If the tank should leak anytime during the first five years, under the terms of the warranty, A. O. Smith will repair or replace the tank; installation, labor and handling extra.

NOTE: THIS OUTLINE IS NOT A WARRANTY. For complete information, consult the written warranty or A. O. Smith. Warranty does not apply to product installed outside of the United States of America or its territorial possessions and Canada.

#### SAMPLE SPECIFICATION FOR FACTORY JACKETED AND INSULATED STORAGE TANKS

When jacketed or insulated these models meet R12.5 minimum thermal insulation requirements of NRCan and current edition of ASHRAE/IESNA 90.1.ASME storage tank to be A. O. \_\_gallons with a diameter of \_\_\_\_\_\_ inches. Tank(s) shall be constructed and stamped according to ASME Smith Custom-Line model . Capacity to be specification for \_psi working pressure. Manhole (12 x 16), handhole (4 x 6) or inspection openings (2 - 2') shall be installed in accordance with ASME code requirements and manufacturer(s) standard practice. Tank to be constructed of (carbon steel) \_ \_. Lining shall be (glass) \_\_\_ \_. Tank(s) lined with (glass) \_ \_lining shall be equipped with the number and size of magnesium anode rod(s) sufficient to provide adequate protection for the tank lining. Tank shall be (vertical, horizontal) design and provided with \_ ring base, (or \_ Saddles.)

For Technical Information call 888-599-2837. A. O. Smith Enterprises Ltd. reserves the right to make product changes or improvements without prior notice.