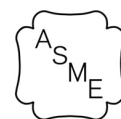


Multi-Purpose Tanks

Our line of Chilled Water and Hot Water Multi-Purpose tanks deliver all the quality and performance you expect from Taco products. They are built to last with shell, heads and ANSI flanges with ASME constructed for 125 & 150 psi working pressures all while providing outstanding performance in the field, up to a maximum operating temperature of 240°F. These products are available in standard sizes from 2" through 10" to meet the needs of a broad range of applications with custom unit sizes available. Our tank volumes range from 50 gallons up to 1050 gallons with 16 sizes as standard and custom sizes to meet our customers' requirements.



Specifications

Many applications arise where a boiler or chiller may operate in a short cycle condition. Short cycling of the boiler or chiller is not recommended due to the high possibility of damage and or shortened component life. Short cycling is frequently due to the lack of BTU load balance between the demand of the hydronic system and the chiller or boiler BTU capacity.

A Multi-Purpose Tanks (MPT) is often utilized to introduce additional system fluid volume into the hydronic system to reduce the likelihood of this short cycling. A properly sized buffer tank optimizes the operation of the chiller or boiler and often introduces BTU storage allowing the system to operate without cycling the chiller or boiler. MPT's are available in vertical or horizontal orientations with a wide range of diameters and lengths (available storage volumes.)

Taco Inc. is pleased to offer a sizing app to aid in the sizing of Multi-Purpose Tanks. This app may be located at:
www.taco-hvac.com/wizard_buffer_tanks.html

SPECIFICATIONS

- Designed and constructed per ASME Code Section VIII, Division 1.
- Construction: Carbon Steel with Exterior Red Oxide Primer Finish on ALL tanks
- Standard Design Pressure and Temperature: 125 psi @ 240°F
- Flanged inlet and outlet System Connections (standard sizes shown)
- Registered with the National Board of Pressure Vessel Manufacturers
- No Internal Baffle
- Base Ring
- Raised Nameplate

OPTIONS (Consult Factory)

Optional materials of construction

- Higher design pressures and temperatures
- Optional System Connection sizes available

THERMAL INSULATION OPTIONS

Chilled Water For Interior use

- 1/2" Armaflex_"C"
- 3/4" Armaflex_"E"
- 1" Armaflex_"D"
- 1-1/2" Armaflex_"F"
- 2" Armaflex_"G"

Chilled Water For Exterior use

- 1/2" Armaflex with 0.020 nom. Aluminum Jacket_"K"
- 3/4" Armaflex with 0.020 nom. Aluminum Jacket_"L"
- 1" Armaflex with 0.020 nom. Aluminum Jacket_"M"
- 1-1/2" Armaflex with 0.020 nom. Aluminum Jacket_"P"
- 2" Armaflex with 0.020 nom. Aluminum Jacket_"R"

Hot Water

- 1" Silicone / Fiberglass_"H"
- 2" Silicone / Fiberglass_"J"

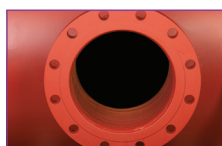
Chilled Water & Hot Water Applications

- 2" Polyiso Form with 0.020 nom. Aluminum Jacket_"S"
- 3" Polyiso Form with 0.020 nom. Aluminum Jacket_"T"



ANSI Flange Data Table Class 150 RF30

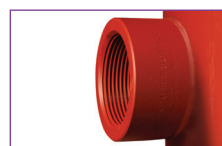
SIZE	O.D.	B.C.	#HOLES	HOLE DIA.	CL-CL
2"	6"	4-3/4"	4	3/4"	3.359
3"	7-1/2"	6"	4	3/4"	4.243
4"	9"	7-1/2"	8	3/4"	2.870
6"	11"	9-1/2"	8	7/8"	3.635
8"	13-1/2"	11-3/4"	8	7/8"	4.497
10"	16"	14-1/4"	12	1"	3.688



Flanged



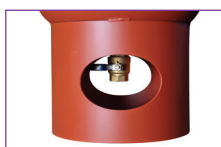
Grooved



Threaded (up to 3")



Saddles



Base Ring



Legs

INSULATION OPTIONS FOR ALL TACO MULTI-PURPOSE TANKS



Chilled Water Insulation



Chilled/Hot Water with Aluminum Jacket Insulation



Hot Water Insulation

Access the convenient **Buffer Tanks Wizard** by going to
www.taco-hvac.com/wizard_buffer_tanks.html

residential and commercial hydronic

About Us Products Applications Apps

Buffer Tanks Wizard

Select an Application

- Chilled Water Cooling
- Hot Water Heating
- Hot Water Primary-Secondary

Buffer Tanks Wizard

Primary-Secondary HW Heating

P/S Buffer Tank Calculations		Heating
On-Cycle or Run Time:	2	Minutes
Min. Boiler Output:	250000	BTU/Hr.
Min. System Load or Smallest Zone Output:	0	Min. Building Load (BTU/Hr.)
System Differential Temperature:	10	(ΔT)°F
Net Required Min. Buffer Tank Volume:	--	Gallons
Taco Tank Size		Find Tank Size

Buffer Tanks Wizard

Tank Construction

Option	Selection
Application: Hot Water Primary-Secondary	
On-Cycle or Run Time: 2 minutes	
Min. Boiler Output: 250000 BTU/Hr.	
Min. System Load or Smallest Zone Output: 0 BTU/Hr.	
System Differential Temperature: 10 (ΔT)°F	
Net Required Min. Buffer Tank Volume: 100 Gallons	
Tank Size: 100 Gallons	
Tank Type: Buffer Tanks Show standard specifications	
<ul style="list-style-type: none"> Buffer Tank, Vertical (2) System Connections, High (BTH) Buffer Tank, Vertical (2) System Connections, Low (BTL) 	
"Factory Special Designs"	
<ul style="list-style-type: none"> Buffer Tank, Vertical (2) System Connections, Reagent (RTS) Buffer Tank, Horizontal (2) System Connections, High (BHS) Buffer Tank, Horizontal (2) System Connections, Low (BHL) Buffer Tank, Horizontal (2) System Connections, Side (BHS) 	
Multi-Purpose Tank: Show standard specifications	
<ul style="list-style-type: none"> Multi-Purpose Tank, Vertical (4) Connections, VPT 	
System Connections:	
<ul style="list-style-type: none"> Flanged Grooved Threaded, NPT up to 3/4" 	
Connection Size: 1/2"	

Buffer Tanks Wizard

Tank Details

Option	Selection
Application: Hot Water Primary-Secondary	
On-Cycle or Run Time: 2 minutes	
Min. Boiler Output: 250000 BTU/Hr.	
Min. System Load or Smallest Zone Output: 0 BTU/Hr.	
System Differential Temperature: 10 (ΔT)°F	
Net Required Min. Buffer Tank Volume: 100 Gallons	
Tank Type:	
System Connections:	
Connection Size:	
Insulation Options: Silicone/Fiberglass Jacketed:	
Part Number: BTLO1000-12SHK	

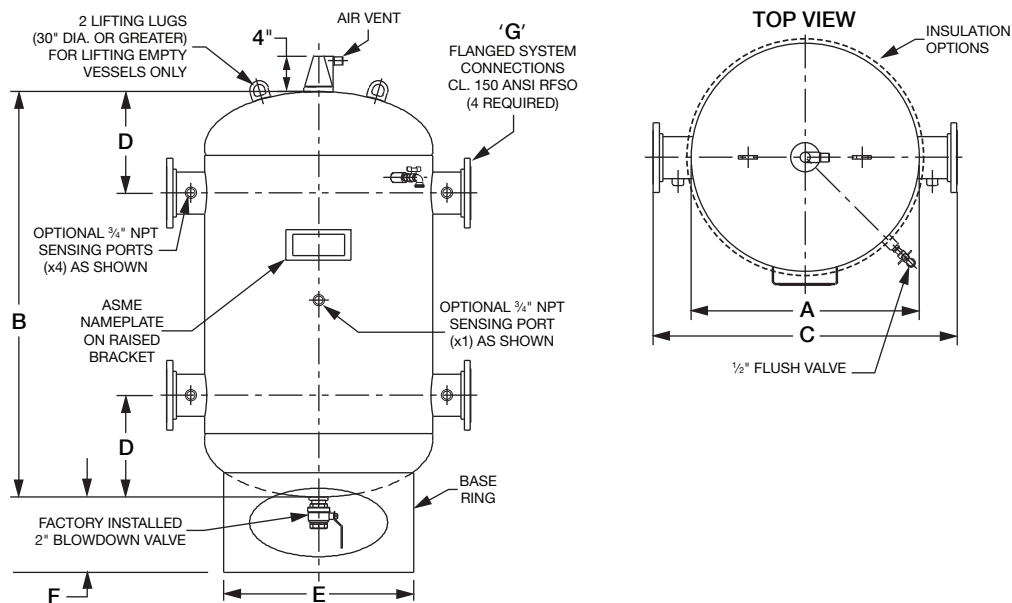
Print tank details

Have non-standard requirements? Click here to send them to Taco

Quick Reference Guide

Model	Gallons	Actual Gallons	A Tank Dia. (in.)	B Tank Height (in.)	C Flange Spread (in.)	D Head to Flange	E Base Ring (Dia.)	F Base Ring AFF (in.)	G Nozzle Size (in.)	Maximum Approx. Dry Wt. (LBS.)	Maximum Flooded Wt. (LBS.)	Surface Area (Sq. Ft.)
MPT0050F__-125NX	50	55	20"	43.0	30	11-1/2	16	6-3/4	2", 3", 4"	190	607	21
MPT0075F__-125NX	75	82	24"	46.0	34	12-5/8	20	6-3/4	2", 3", 4"	240	866	27
MPT0100F__-125NX	100	111	24"	61.0	34	12-5/8	20	6-3/4	2", 3", 4"	280	1,114	34
MPT0125F__-125NX	125	139	24"	76.0	34	12-5/8	20	6-3/4	2", 3", 4"	330	1,373	42
MPT0150F__-125NX	150	168	30"	60.0	40	14-1/4	24	8	2", 3", 4"	510	1,761	43
MPT0180F__-125NX	180	201	30"	71.0	40	14-1/4	24	8	2", 3", 4"	590	2,091	50
MPT0200F__-125NX	200	222	30"	78.0	40	14-1/4	24	8	2", 3", 4"	630	2,298	55
MPT0250F__-125NX	250	278	36"	69.0	46	16-1/4	30	7-1/8	3", 4", 6"	710	2,795	59
MPT0300F__-125NX	300	334	36"	82.0	46	16-1/4	30	7-1/8	3", 4", 6"	820	3,322	69
MPT0350F__-125NX	350	386	36"	94.0	46	16-1/4	30	7-1/8	3", 4", 6"	910	3,829	79
MPT0400F__-125NX	400	443	48"	65.0	58	18-7/8	40	8-5/8	4", 6", 8"	1010	4,346	80
MPT0450F__-125NX	450	497	48"	72.0	58	18-7/8	40	8-5/8	4", 6", 8"	1080	4,833	88
MPT0500F__-125NX	500	551	48"	79.0	58	18-7/8	40	8-5/8	4", 6", 8"	1160	5,330	95
MPT0700F__-125NX	700	712	48"	100.0	58	18-7/8	40	8-5/8	4", 6", 8"	1300	7,138	117
MPT0850F__-125NX	850	873	54"	99.0	64	22-5/8	44	9-3/8	4", 6", 8"	1880	8,969	127
MPT1050F__-125NX	1,050	1,077	60"	99.0	72	24-3/4	50	9-3/4	6", 8", 10"	2130	10,887	143

F__ Connection Size Required, Example: F06



Refer to standard submittal as this sheet is a "Quick Reference Guide" only.
Go to www.taco-hvac.com > Products > Multi-Purpose Tanks > Submittals

Multi-Purpose Tank Coding Matrix without Baffles

Position	1, 2	3	4, 5, 6, 7	8	9, 10	11	12, 13, 14	15	16
Description	Buffer Tanks	Connection Location	Gallons	Connection Type	Nozzle Size	Design Temp. °F	Design psi	Insulation	Sensing Ports
Part Number	MP	T	0050	F	04	-	125	N	X
<hr/>									
1, 2, 3						11			
Multi-Purpose	MPT	Multi-Purpose, Vert., Base Ring Design				Design Temp. °F	—	240°F, Standard, MPT Series	
Carbon Steel							A	400°F	
Construction	CT	<i>Custom Tank*</i>					B	450°F	
							9	<i>Custom Temp Request*</i>	
4, 5, 6, 7						12, 13, 14			
Capacity Gallons	0050	50	Gallons			Design Pressure	125	psi	
	0075	75	Gallons				150	psi	
	0100	100	Gallons				9	<i>Custom Pressure Request*</i>	
	0125	125	Gallons						
	0150	150	Gallons			15			
	0180	180	Gallons			Insulation Options	N	No Insulation required	
	0200	200	Gallons				H	1" Silicon/Fiberglass	
	0250	250	Gallons				J	2" Silicon/Fiberglass	
	0300	300	Gallons					<i>For Interior use. Chilled Water Insulation.</i>	
	0350	350	Gallons				C	1/2" Armaflex	
	0400	400	Gallons				E	3/4" Armaflex	
	0450	450	Gallons				D	1" Armaflex	
	0500	500	Gallons				F	1-1/2" Armaflex	
	0700	700	Gallons				G	2" Armaflex	
	0850	850	Gallons					<i>For Exterior Use. Chilled Water Insulation.</i>	
	1050	1050	Gallons				K	1/2" Armaflex w/ Alum. Jacket	
	---	<i>Custom Gal. Request*</i>					L	3/4" Armaflex w/ Alum. Jacket	
8							M	1" Armaflex w/ Alum. Jacket	
Connection	F	Flanged					P	1-1/2" Armaflex w/ Alum. Jacket	
	G	Grooved					R	2" Armaflex w/ Alum. Jacket	
	T	Threaded, FNPT up to 2-1/2"						<i>For Interior/Exterior Use. Hot Water/Chilled Water Insulation.</i>	
	9	<i>Custom Type Request*</i>					S	2" Polyisocyanurate with Alum. Jacket	
							T	3" Polyisocyanurate with Alum. Jacket	
							9	<i>Custom Insulation Request*</i>	
9, 10						16			
Nozzle Size	02	2"	ANSI			3/4" Sensing Port	X	None	
	03	3"	ANSI				1	Port on Shell	
	04	4"	ANSI				4	Port on each Nozzle	
	06	6"	ANSI				5	Both 1 & 4, Optional	
	08	8"	ANSI				9	<i>Custom Port Request*</i>	
	10	10"	ANSI						
	---	<i>Custom Size Request*</i>							

PLEASE NOTE: Any "Custom Request" a Part Number to this Matrix, Sketch & Description MUST BE Sent with the Request.



Selection Software (APPS)

Pump Selection: www.taco-hvac.com/en/wizard_pumps.html

Buffer Tanks: www.taco-hvac.com/wizard_buffer_tanks.html