



SUBMITTAL

**ZCBT-SERIES**  
CHILLED WATER BUFFER TANK

**Models:** ZCBT-120 thru ZCBT-1040

Date: 9/25

Job Name _____	Submitted By _____	Date _____
Location _____	Approved By _____	Date _____
_____	Order No. _____	Date _____
Engineer _____	Notes _____	
Contractor _____	_____	
Sales Rep. _____	_____	

**Description**

Zilmet ASME Chilled Water Buffer Tanks (ZCBT) are designed for chilled water systems with insufficient water volume capacity in relation to the chiller capacity. Relatively low water volume systems require additional “buffer” capacity for the systems to eliminate problems such as excessive chiller cycling, poor temperature control, and erratic system operation. The properly sized CBT adds the necessary volume to “buffer” the system volume.

**Construction**

Shell: Carbon Steel  
Exterior: Primer Painted

**Performance Limitations** Maximum

Design Temperature: 450°F Maximum  
Design Pressure: 125 PSIG\*

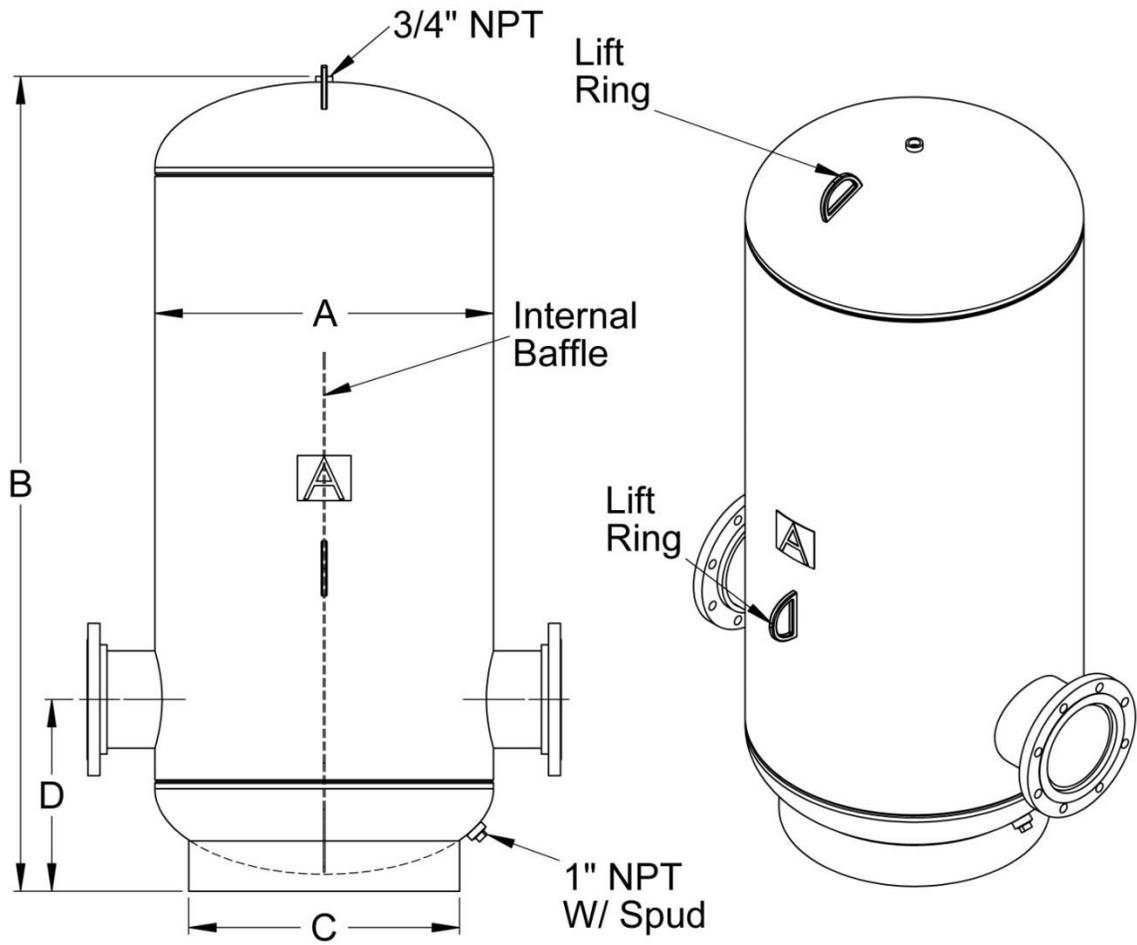
\*200 & 250 PSIG available

Model Number	Part Number	Tank Volume (Gallons)	Tagging Information	Quantity
ZCBT-120	55240120	120		
ZCBT-200	55300200	200		
ZCBT-300	55360300	300		
ZCBT-500	55420500	500		
ZCBT-850	55540850	850		
ZCBT-1040	55601040	1040		

**Typical Specification**

Furnish and install, as shown on plans, a ZCBT- \_\_\_\_\_ as manufactured by Zilmet USA. The tank shall incorporate a baffle to promote tank water storage temperature stratification. The system water connections must be \_\_\_\_\_” (NPT/flanged/grooved). The ZCBT must be constructed in accordance with the most recent addendum of Section VIII Division 1 of the ASME Boiler and Pressure Vessel Code and constructed and stamped for 125 PSI working pressure @ 450°F.

Each tank shall be Zilmet model number ZCBT- \_\_\_\_\_ or approved equal.



**Dimensions & Weights**

Model Number	Dims. In Inches			(D In Inches) for Various Connections								Max. Shipping Wt (lbs)
	A	B	C	2" Flg	2 1/2" Flg	3" Flg	4" Flg	5" Flg	6" Flg	8" Flg	10" Flg	
ZCBT-120	24	60	20	12	12 1/4	12 1/2	13	14	14	15	16	410
ZCBT-200	30	72	24	14	14 1/4	14 1/2	15	16	16	17	18	555
ZCBT-300	36		30	15 3/4	15 3/4	16	16 1/2	17	17 1/2	18 1/2	19 1/2	690
ZCBT-500	42	90	36	17 1/2	17 3/4	18	18 1/2	19	19 1/2	20 1/2	21 1/2	1150
ZCBT-850	54	96	48	21	21 1/4	21 1/2	22	23	23	24	25	1945
ZCBT-1040	60		54	22 3/4	23	23 1/4	23 3/4	24 1/4	24 3/4	25 3/4	26 3/4	2138

**Cv Values – Gal/min/psi<sup>0.5</sup>**

Model	Gal.	Dia.	Ht.	2" NPT	2 1/2"	3" NPT	4" FLG	6" FLG	8" FLG	10" FLG	12" FLG
CBT-120	120	24	60	55	80	125	230	650	950	1361	1886
CBT-200	200	30	72	58	84	131	242	683	998	1433	1986
CBT-300	300	36	72	61	88	138	254	717	1047	1505	2090
CBT-500	500	42	90	64	93	145	266	752	1100	1580	2195
CBT-850	850	54	96	67	97	152	280	790	1155	1659	2304
CBT-1040	1040	60	96	70	102	160	294	830	1212	1742	2419

- Notes:**
- Insulation optional
  - Larger size, grooved, or NPT connections available
  - For 3" flange or smaller add 8" to tank diameter for face-to-face dimensions
  - For 4" flange or larger add 12" to tank diameter for face-to-face dimensions