

**LAARS®** Commercial Chilled Water Buffer Tanks



# Chilled Water Buffer Tanks from Laars<sup>®</sup> Heating Systems Company

Chilled Water Buffer Tanks from Laars® Heating Systems are designed to increase water volume capacity, in relation to the chiller capacity. Low water volume systems may require additional buffer capacity to eliminate excessive chiller cycling, poor temperature control or erratic system operation. A Chilled Buffer Tank can buffer the system volume.

These tanks increase the capacity of a chilled water system and help stabilize the return water temperature. This results in fewer cycles of the compressor and better temperature control. Between three and ten gallons of total capacity in the system per nominal ton is recommended, depending on the accuracy of temperature control required. Five gallons per nominal ton is recommended for a typical air conditioning system.

- All tanks are constructed and certified in accordance with ASME section VIII, Div. I code
- Red oxide shop primer exterior
- Spray foam insulation available, R-16 value and acrylic top coat
- Custom sizes available upon request
- Can be ordered in vertical or horizontal orientation



## LAARS® CHILLED WATER BUFFER TANKS

The Laars<sup>®</sup> Chilled Water Buffer Tank provides additional water volume capacity. It helps eliminate excessive chiller cycling, poor temperature and erratic system operation.

With the Laars® Chilled Water Buffer Tank you'll get a

stabilized water temperature return.



#### **Rigid Polyurethane Foam with Acrylic Topcoat**

A versatile rigid foam and acrylic sealant coating can be applied to any tank. The 100% acrylic topcoat is formulated for applications over spray polyurethane foam and is designed to withstand extreme weather and a full range of environmental conditions. The two component polyurethane foam is applied at ambient temperatures, directly to the vessel in the desired thickness. The 2-coat topcoat is then applied from a high-pressure spray gun and allowed to dry between applications.

Laars<sup>®</sup> tanks with sprayed-on rigid insulation with acrylic topcoat exceeds ASHRAE 90.1 requirements with 2.25" of high-density polyurethane foam with an "R" value of R-16. SPF meets requirements for California Title 24. Laars<sup>®</sup> spray foam insulation has the best fire spread rating with a class I foam with less than a 25-flame spread rating suitable for boiler room applications.

		А	В	C	D	E	F	G	
Model	Capacity	Inlet/ Outlet	Drain	Vent	Floor to Top of Heater	Jacket Diameter			Approx. Weight Lbs.
Number	Gal. Liters	in. cm.	in. cm.	in. cm.	in. cm.	in. cm.	in. cm.	in. cm.	Lbs. Kg.
BT-VNB-24-078-XCSX-XX	130 330	2 NPT 5	1 2	1 2	78 198	24 61	20 51	6 15	375 170
BT-VNB-30 083-XCSX-XX	210 533	3 FIG 8	1 2	1 2	83 211	30 76	24 61	6 15	425 193
BT-VNB-36 078-XCSX-XX	300 762	4 FIG 10	1 2	1 2	78 198	36 91	24 61	6 15	633 287
BT-VNB-36 100-XCSX-XX	400 1016	4 FIG 10	1 2	1 2	100 254	36 91	30 76	6 15	715 324
BT-VNB-48 083-HCSX-XX	528 1341	6 FIG 15	1 2	1 2	83 211	48 122	31 79	6 15	1150 522
BT-VNB-54 102-HCSX-XX	850 2159	6 FIG 15	1 2	1 2	102 259	54 137	32 81	6 15	1630 739
BT-VNB-60 102-HCSX-XX	1040 2642	8 FIG 20	1 2	1 2	102 259	60 152	32 81	6 15	2280 1034

#### Laars® Chilled Water Buffer Tanks

\*\* Hand holes required on tanks above 36" diameter Designed to ASME code.



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