

Package

Shell & Tube Glycol Chiller

By 

## Get to Know the Best Shell & Tube Glycol Chiller



Are you tired of working in a factory without a low temperature air condition? Here is the best way to tackle this problem. **ITC's** Package Shell and Tube Glycol Chiller will definitely stun you by its marvelous effectiveness and efficiency. According to the sudden change of climate especially into hot weather, many companies fail their business because their products have deteriorated in quality. This is why **ITC** is here to serve all your needs by Package Shell and Tube Glycol Chiller

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## Package

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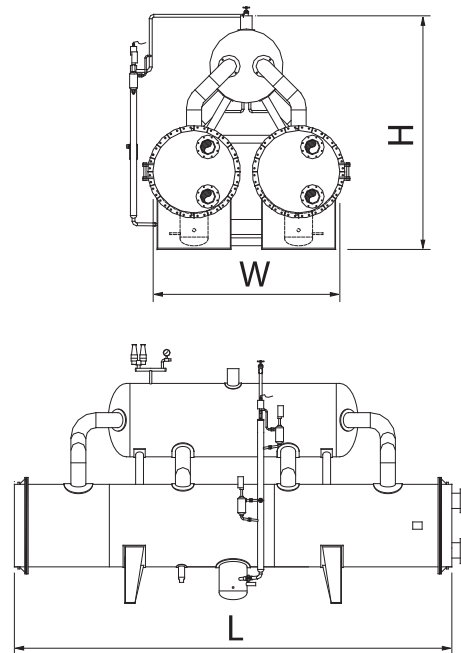
#### How does it work?

The Package shell and Tube Glycol Chiller composed of two chillers and a surge drum. Each chiller contains a glycol substance circulating inside the tube. Having an inlet temperature of  $3^{\circ}\text{C}$ , glycol will flow through the tube while the tube's external structure bathes in the liquid ammonia. Consequently, heat exchange happened by the process of conduction can enhance the cooling effect of the glycol. The glycol exits the tube with an outlet temperature of  $-2^{\circ}\text{C}$  which then directly flows to the unit cooler. Eventually, cool air is produced.

Also, the surge drum, which is attached on top of the twin tube chiller, consists of liquid and ammonia gas. By the virtue of gravity, liquid ammonia flows down to the chiller tube while the gas is suctioned up directly. It will then move up to the compressor.

#### Application:

Shell & Tube Glycol Chiller is widely employed in various food and beverage industries, hospitals, pharmaceutical industries, and etc.



#### Material & Construction

- Tube ASTM A106 Grade B
- Shell ASTM A516 Grade 70
- Tube sheet ASTM-285 Grade C
- Design code according to ASME Sec. VIII Div. 1
- Max working pressure on Shell side 16 bar
- Max working pressure on Tube side 10 bar

### Standard Model Shell & Tube Glycol Chiller Specification

#### Design Condition

Hot side Media 25% Polypropylene, Inlet temp.  $+3^{\circ}\text{C}$ , Outlet temp.  $-2^{\circ}\text{C}$   
 Cold side Media Flooded Ammonia Evaporating temp.  $-5^{\circ}\text{C}$

Model	Capacity kW	Flow rate $\text{m}^3/\text{hr}$	Liq. in NB	Suction NB	Glycol in-out NB	Dimension (mm)			Operating Weight kg	$\text{NH}_3$ charge kg
						L mm	W mm	H mm		
STGC-30-114	400	72	32	75	100	6,510	960	2,720	5,390	830
STGC-36-165	580	105	32	100	125	6,510	1,110	2,970	7,790	1,180
STGC-42-227	800	144	40	100	125	6,510	1,260	3,120	10,230	1,610
STGC-48-341	1,200	217	50	125	150	6,510	1,410	3,430	14,650	1,920
STGC-54-427	1,500	271	50	125	200	6,510	1,570	3,730	18,280	2,460
STGC-60-526	1,850	335	50	150	200	6,510	1,720	3,880	22,720	3,030
STGC-48.2-682-D	2,400	434	65	150	2 x 150	6,510	2,950	3,730	29,210	3,840
STGC-54.2-853-D	3,000	542	75	200	2 x 200	6,510	3,260	4,040	36,380	4,930
STGC-60.2-1,052-D	3,700	670	75	200	2 x 200	6,510	3,560	4,340	45,530	6,050

Note : 1.) Other capacity and dimension are available, please contact manufacturer.  
 2.) Specifications subject to change without notice.