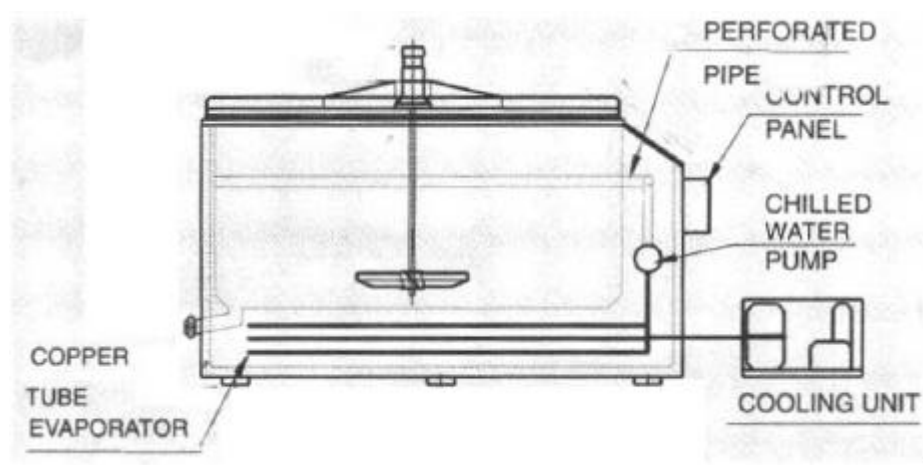


ICE BANK TANK TYPE MILK CHILLING SYSTEM



MODEL: EC/IBT

ENCON make Open Type Ice Bank type Stainless Steel Milk Cooling Tank comprising of:



Capacity: 300 & 500 Liters

- a) **Milk Tank:** Manufactured in SS304 material complete with single piece detachable lid, Agitator with drive arrangement, Inlet holes, outlet connection with 51 mm 2-way butterfly valve in SMS standard and Stainless Steel dipstick for measuring the volume of milk. This tank will be placed within an Ice Bank Tank. The milk tank will be in semi-cylindrical in shape. As ice water is used as cooling agent, it is not possible for milk to freeze.
- b) **Ice Bank Tank:** Will be manufactured in SS304 material for both inner & outer shell & with high density PUF insulation in between the two shells. The Ice Bank Tank will house the evaporator coils made of copper, Ice Water Circulation Pump, Ice limiter, corrosion free spraying tubes, drain connection etc. The Ice Bank Tank will be vertical rectangular in shape & will be standing on ball feet legs. The tank will have an opening with a lid to inspect the Ice Bank Tank whenever required. The continuous cold supply in the ice-bank tank means that the period required to reduce temperature from 35°C to 10°C is approximately 50% less than direct expansion
- c) **Condensing Unit:** Designed to suit Indirect Expansion type cooling system comprising of Hermetic Compressor operating on Freon-22, air-cooled condenser with fan & fan motor, necessary refrigeration controls and accessories. Sufficient quantity of ice will be built over a period of time by operating the refrigeration unit and at the time of milk collection chilled water will be sprayed over the surface of milk tank & desired cooling is achieved. The corrosion resistant PVC tubes provided with holes do spraying.
- d) **Control Box:** To control the operation of the unit such as cyclic agitation, cooling cycle, digital display of temperature. One control box will cover incoming supply & distribution to the electrical components with internal wiring & controls.

TECHNICAL DATA SHEET FOR IBT BULK COOLER

Description	:	IBT
<i>Milk Tank</i>	:	
Rated Capacity – Liters	:	300 & 500
Geometric Capacity – Liters (Approximate)	:	358 & 523
Sheet Thickness	:	AISI 304/ 1.0 mm
Milk Quantity Measurement	:	Dip Stick – Calibration Chart.
Outlet	:	40 mm SMS
Agitator Speed	:	25 rpm
Agitator Power	:	80 Watts min.
<i>Ice Bank Tank</i>	:	
Sheet Thickness – Inner – mm	:	AISI 304/ 1.0
Sheet Thickness – Outer - mm	:	AISI 304/ 1.5
Insulation	:	CFC Free PUF – 40 Kg/Cu. m.
Evaporator	:	Hard Copper
Evaporator Coil Dia	:	5/8”
Water Pump – Make	:	Remi, Toolu or Equivalent
Water Pump – Power	:	0.70 kW – 100 LPM @ 10 MWC
Refrigeration Unit	:	
Design Basis	:	ISO 5708
Compressor type	:	Hermetic
Compressor Make		Copeland / Kirloskar Copeland*
Model	:	
Nominal KW	:	2.5 & 2.7
Evaporation Temp.	:	(-) 6.7 °C
Condensing Temp.	:	(+) 50.0 °C
<i>Condenser</i>	:	Air Cooled
Refrigeration Control	:	Ice Thickness Control → Thermostatic Expansion Valve
<i>Design Assumptions</i>	:	
Product/Application	:	Milk/Cooling
Cooling Requirement/Shift	:	Milk will be cooled from 35 to 4 °C within 2 hours. (i.e. 1 milking everyday collection)
Cooling Media	:	Chilled Water (Indirect Expansion)
Density	:	1.032
Specific Heat	:	0.95

* We reserve the right to change the make / model of compressor without change in performance agreed.

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