



# **Industrial Refrigeration Equipment & Reefers**

## **ABOUT US**

Incepted in the year 1980, **Bharat Refrigerations Pvt. Ltd.** has strived it utmost to provide solution to the cooling needs and requirements of our valued customers. Designed in compliance with verified industry standard, our products are widely acknowledged for maximum cooling efficiency, low power consumption and longer service life.

With the assistance of our advanced technology, we have been able to achieve excellence and perfection in designing and manufacturing of industrial and commercial refrigeration equipment. With the guidance of Mr. T. M. Venu (Founder of Bharat Refrigerations Pvt. Ltd.), our company has gained a prestigious position in the domestic market. Owing to his sharp business acumen and focused strategies, we have emerged as premium solution provider in industrial process cooling arena.

**Bharat Refrigerations Pvt. Ltd.** has been take over by **Ice Make Refrigeration Pvt. Ltd.** in December 2016 to serve our Valued Customers by providing total cooling solution & better after sales services in southern part of India.

Established in 1989, **ICE MAKE Refrigeration Pvt. Ltd.** has been successfully satisfying the needs of its customers since inception. It has a humble beginning trying to fulfill the requirements of refrigeration equipments, from its production to its after-sales service. The vision to become a known leader in India of refrigeration equipments in terms of quality, price and service was clear. The Three-tier policy of the company also embedded customer satisfaction with respect to product range and service network. For this, the company recruited efficient, qualified and dedicated human resource though it meant additional costs and overheads to the company. ICE MAKE Refrigeration's objective is customer satisfaction and not Profit Margin. Their word-of-mouth publicity has helped us not only to acquire new references but also to capture a significant market share in the industry.

Ice Make is **ISO 9001: 2015, ISO 14001:2004 & BS OHSAS 18001:2007 Certified and also CE certified product range** that shows high standard of quality from material procurement to final delivery and after – sales service.







#### **MISSION & VISION**

We are committed to design, develop, manufacture and supply high quality Refrigeration and Air Conditioning Equipments that comply with customer and legal requirements; and continually improve the effectiveness of the Quality Management System, thereby ensuring customer satisfaction.

Our Vision is to be a leader in technology, in offering total cold chain solutions with energy savings & environmental friendly products and excellent after sales services.

## WHY BHARAT REFRIGERATIONS

We are in the business of exploring new frontiers with innovative ideas in providing complete cooling solutions for total customer satisfaction.

- Tailor made solutions
- Excellent service with separate Customer Care Department
- Excellence in Quality
   Customer Focus
- Building Trust
- Exponential Growth

#### **OUR COMMITMENT**

We are committed to quality, integrity and excellence in all areas of business. We pledge to monitor our performance as on-going activity and strive for continual improvement, through enhancing skills of all employees through training and motivation.

#### **PRODUCT RANGE**

- Refrigerated Container(GRP / GIPP)
- Eutectic Mobile Container (GRP / GIPP)
- Cold Room / Storage
- Glass Door Display Chiller
- Incubation Chamber for Curd
- Ripening Chamber
- Pre-Cooling Chamber
- Blast Chiller / Freezer
- Cold Room Door (Hatch / Sliding Door)
- Condensing Unit (Air / Water Cooled)
- Evaporator Unit

#### **INDUSTRIES WE SERVE**

- Dairy Product Industry
- Ice Cream Industry
- Food Processing Industry
- Agro Industry
- Horticulture / Floriculture Industry
- Hotel Restaurant
- Retail Outlet for Dairy Ice Cream

- Electric Control Panel
- Water Chilling Plant
- Brine Chilling Plant
- Oil Chilling Plant
- Ice Building Tank (IBT)
- Mini Blast Chiller / Freezer
- Bulk Milk Chiller
- Ageing Vat
- Ice Cream Hardener (Static/Tunnel Type)
- Ice Candy Production Machine
- Mortuary Chamber
- Hospitality Industry
- Pharmaceutical Industry
- Plastic Industry
- Chemical Processing Industry
- Biological / Research
- Logistic
- Seed Industry

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Bharat offers a wide range of Refrigerated Containers are design for transportation with the temperature range (+12°C to -25°C) for all perishable foods on all type of vehicles (Small & Mini Truck).

# LOW WEIGHT **HIGH STRENGTH BETTER INSULATION Refrigerated Container** Sec. 18.7 h



## **TRANSPORT REFRIGERATION**



Type of Construction	: Heavy structure with Pre Fabricated Sandwich Panels with Cam Lock on all sides All panels fit together by Cam Lock, so container becomes air-tight fit
Wall Thickness	: Insulated wall thickness 80mm (Small Vehicle), 100mm (Mini Truck) & 125mm (Heavy Loading Truck)
Surface Material	: Outside Pre coated GI sheet Skin Thickness 0.8 mm or S.S. grade 304, Thickness 0.5mm Inside Pre coated GI sheet Skin Thickness 0.8mm or S.S. grade 304, Thickness 0.5 mm.
Type of Floor	<ul> <li>We are providing outside Pre coated GI sheet, Thickness 0.8mm &amp; Inside 9mm or 19mm Marine Ply with FRP layer for water proof &amp; top material as per below details</li> <li>Option -1 Aluminum 'T' profile for easy moving &amp; air rotation.</li> <li>Option -2 Aluminum Checkered Plate.</li> <li>Option -3 S.S 202 rectangle pipe structure for batter easy moving &amp; air rotation.</li> <li>Option -4 Aluminium Corrugated Profile</li> <li>Option -5 S.S. Corrugated Profile</li> </ul>





**Door & Windows** 





Aluminum T Profile

Aluminum Checkered Plate

Single & Double loft (fully open) insulated doors, hatch door (Window) & side door fitted fitted with double gasket with heavy door locking mechanisms for special transport segment. Drop "T" handles gear, Rear door hinges, Rear door hinges bracket,

S.S.Pipe

S.S. Corrugated Profile

Door: Single loft Door For Small Vehicle & Double Loft Door For Mini and Heavy Loading Truck



**Double Loft with** Window (Fully Open)



#### **Door Curtain**

Seals Rubber Gasket.

As per customer requirement we provide you PVC Door curtain. As per your door size kids



Side Door



Single Loft Door



#### Ladder for UP and DOWN on Container

Useful for up down on container & easy services for refrigeration unit for large truck.

Totally strong & welding with container.



Rubber Buffer Useful for backside door protection



Foot Steps : Steps foot with M.S. & Aluminium Chequered Plate



Seal Gaskets : Rubber Gasket with 4 lips for better fitment of Door.



Drainage System : Made by S.S. & for drain the water coming from system Toll Free No.: 1800 102 4615 🐵 info@bharatref.in 🙆 www.bharatref.in

## TRANSPORT REFRIGERATION





Side Marker Light : Functions of side marker lamp & side reflex reflector



Drop "T" Handles : Trailer door gears made by S.S. material



LED Light : Vapor & weather proof LED Light



Radium Line : Front side, back side yellow reflection radium line for night time.



Hook on Container : For side lifting hook for easy shifting One to another vehicle

Paint : Weather resistance paint with primer coat-zinc rich epoxy primer, intermediate –epoxy polyamide primer, top coat – bituminous paint In Optional Accessories : Strip Curtain, Side Door, Hatch Door, Storage Rack or Self (made by S.S. Pipe)

## **Modified Design**



Bucket Structure: Design on bended Aluminium panel with 4 mm thickness & SS Corner Profile for solid Covering of container.



**Rear Door Hinges** 

& Bracket :

S.S. Hinges

Sub Frame : Z-section with MS sheet having 4 mm thickness.



Door Frame : Door frame "C" Profile having 2mm SS Sheet.

## **Refrigerated & Eutectic Mobile Container with GRP Panel**

GRP stands for "glass-fibre reinforced plastic", a high grade composite material, consisting of polyester resin reinforced with glass fibre matting.

GRP is highly suitable for refrigerated containers with higher stability, low weight and for exceptional resistance to corrosion.

#### **Features:**

- GRP Container are extremely robust due to their permanent stability and absolute resistance to corrosion
- Long-term weather resistance enables many years of outdoor use
- Low weight is particularly advantageous for refrigeration transportation with low payload and low operating cost
- Smooth interior and exterior surfaces make GRP Container easy to clean
- GRP panels are UV resistant
- GRP Panels is resistance to chemical and fire

## **EUTECTIC MOBILE CONTAINER**



#### MINIMUM MAINTENANCE | NO LOAD ON VEHICLE ENGINE | LOWER OPERATING COST

#### HIGHLY RELIABLE | SUBSTANTIAL POWER SAVING | NO EMISSIONS

Tansfreeze - Eutectic Mobile Container is design for multi deliveries of Ice Cream, Frozen Foods, Sea Foods, Meat, Bakery Products, Fruit-Vegetable & Dairy Products distribution.









Distribute during the day 100% fuel free refrigerated





## **EUTECTIC MOBILE CONTAINER**



#### **SPECIFICATIONS**

Model	DT-1 Detachable model
Power	2 Kw / Hr
Daily Usage	8 hours of charging for 20 to 30 multipoint distribution / ambient 50°C
Container capacity -Inner	45 crates ( Ice cream) 3600 Liters inner volume
Temperature	-20°C (Frozen) I+4°C(chilled) DUAL Temp
Door	1 No rear
Suitable Vehicles	Tata Ace / Mahindra Maximo Tata Super Ace Leyland Dost Bolero Maxi Truck Bolero pickup / Isuzu Dmax

#### EASY TO MOUNT / INSTALL ON ANY LCV



#### WHY CHOOSE TRANSFREEZ MOBILE COLD ROOM / REEFER?

- Requires no fuel to run the system
- Operates at fraction of the cost of diesel driven Reefers
- Very High Temperature Stability
- 💋 Easy to operate Plug & Charge
- No Moving parts = Negligible Maintenance
- Low Temperature Fluctuations at door openings
- High Reliability: Assured product protection during distribution
- Enables a green Cold Chain
- Nation wide service network
  - · Maximum storage capacity
  - High resale value
  - · Easily reparable
  - Low maintenance
  - Container can be shifted to another vehicle during vehicle breakdown / service
  - 100% product protection
  - Low operating cost less than rs.150 per day for cooling
  - Can be used as a cold room during off season
  - Only **Dual Temperature** reefer in india

#### DETACHABLE REEFER CONTAINER ON VARIOUS SMALL / LIGHT COMMERCIAL VEHICLES



Dt1 on Tata Ace



DT1 on Leyland DOST



DT1 on Mahindra Maximo



DT1 on Bolero Maxi Truck



DT1 on Tata Super Ace



DT1 on Boloro Pickup

## **TRANSPORT REFRIGERATION**





**Trans Freez**<sup>®</sup> Mobile Refrigeration



One & Only best choice to store perishable products in volume is Cold Room. We provide complete solution for cold room as we have our own manufacturing unit for Cold Room PUF Panels and Refrigeration Unit. So we can deliver best quality products, best in time service with optimum price to make you happy.





Puf Panel Thickness : 60, 80, 100, 125, 150 mm Application : Storage of Frozen Food- Vegetables, Ice cream, Horticulture, Pharmaceutical, Chemical, Dairy-Bakery, Dry Fruits Temperature :+ 15°C to -40°C

**COLD CHAIN SOLUTION** 



Source



**Display Market** 



Pre Cooling





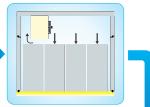




Grading & Sorting



**Blast Freezing** 







Packing

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Market Distribution



#### **Technical Specification**

Thickness Surface Material	<ul> <li>: 60, 80, 100, 125 &amp; 150 mm</li> <li>: GI Pre-Painted Sheet, S.S. Sheet (Grade 304/316 &amp; Surface finish 2B &amp; Mate), GI Plain Sheet, Plain Galvanize Iron. (Inside &amp; Outside different metal can be placed as per your requirement)</li> </ul>
Floor	<ul> <li>: (A) For Kota stone or Concrete floor, Puf Slab with both side tar felt coated.</li> <li>(B) For Kota stone or Concrete floor, both side metal surface panel in which each side fits with lock and prevent temperature loss.</li> <li>(C) Aluminium Checkered Plate with Marine Ply.</li> <li>(D) FRP Clading on floor</li> </ul>
Door	<ul> <li>(b) Fine Ordening of files.</li> <li>(c) Flush Type Swing Door with FRP Profile, Imported Hardware, Push Type Gasket &amp; replaceable heater for easy door operation &amp; long life Opening Size: 24"x72", 30"x72", 34"x78", 46"x84" (Door Opening WxH)</li> <li>(B) Over Lap Type Swing door with frame with metal covering by using heavy duty hardware for better strength Size: 45"x84", 49"x84", 54"x84", 60"x90" (Door Opening WxH)</li> </ul>
Room Size	<ul> <li>: (A) Length &amp; Width Minimum 1.78 mt and Bigger size 0.146 mt in multiples. As per requirement</li> <li>(B) Standard Height for 60 mm thickness 2.47 mt, 80 mm-2.51 mt, 100 mm-2.55 mt, 125 mm-2.60 mt, 150 mm-2.65 mt. Single Panel Height upto 12 mt and above as per your requirement.</li> </ul>

#### Accessories



#### Sliding Door:-

onanig Do	
<b>Opening Si</b>	ize
Width	: 1000/1200/1500/1800 mm
Height	: 2100 to 3000 mm
Thickness	: 80 mm
Panel Surfa	ace Material : Both side GIPP
or S.S as	per requirement



#### **Pressure Ventilator:-**

Tri-action pressure ventilator with/ without heater to balance pressure and vacuum inside cold room.

#### **View Port:-**

12" X12" View port with three layer argon filled toughen glass which can be visible upto -20oC inside the cold room.

#### Strip Curtain:-

Semi transparent PVC strip curtain for negative temperature application to prevent heat loss and ultimately the power.





Door Accessories







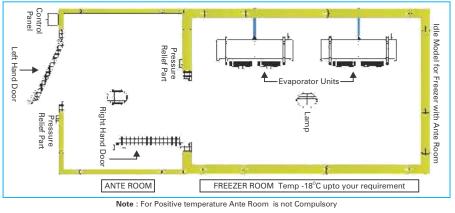
Inside Safety Alarm

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Ramp with Chequered Plate







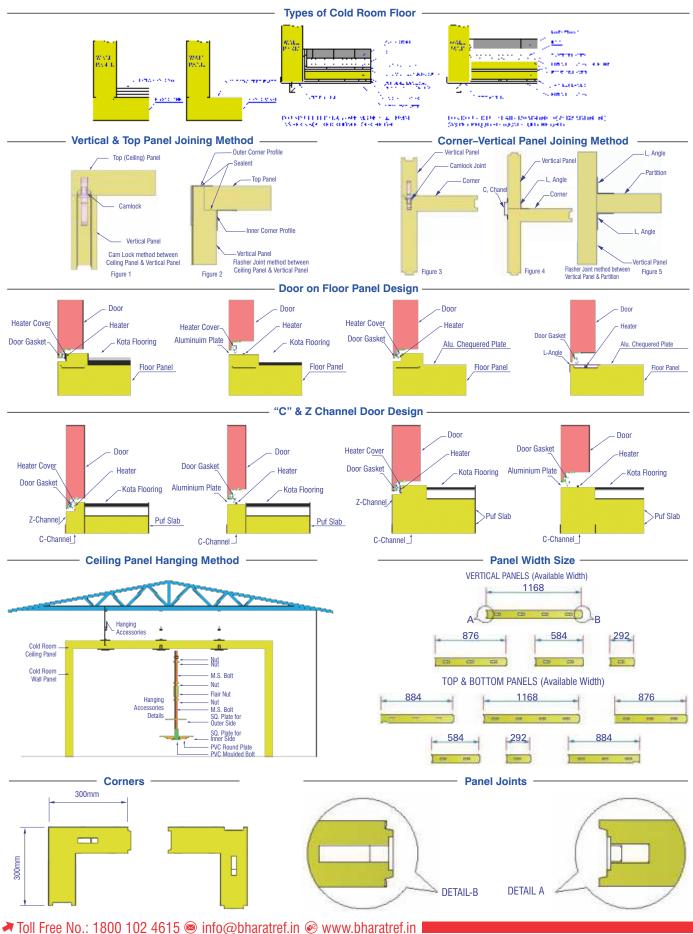
#### Hatch Door:-

Opening Size (WxH): 20"X20", 24"x24", 30"X30"

Different size hatch door with heavy frame for easy material movement in high turnover ice cream and dairy industries.



## **Panel Construction Configuration**





#### **Available Cold Room Size**

#### Standard Length & Width (with common thickness)

Inch	Feet	Meter	Inch	Feet	Meter									
41.25"	3' - 5.25"	1.05	282.75"	23' - 6.75"	7.18	524.25"	43' - 8.25"	13.32	765.75"	63' - 9.75"	19.45	1007.25"	83' - 11.25"	25.58
47"	3' - 11"	1.19	288.5"	24' - 0.5"	7.33	530"	44' - 2"	13.46	771.5"	64' - 3.5"	19.6	1013"	84' - 5"	25.73
52.75"	4' - 4.75"	1.34	294.25"	24' - 6.25"	7.47	535.75"	44' - 7.75"	13.61	777.25"	64' - 9.25"	19.74	1018.75"	84' - 10.75"	25.88
58.5"	4' - 10.5"	1.49	300"	25'	7.62	541.5"	45' - 1.5"	13.75	783"	65' - 3"	19.89	1024.5"	85' - 4.5"	26.02
64.25"	5' - 4.25"	1.63	305.75"	25' - 5.75"	7.77	547.25"	45' - 7.25"	13.9	788.75"	65' - 8.75"	20.03	1030.25"	85' - 10.25"	26.17
70"	5' - 10"	1.78	311.5"	25' - 11.5"	7.91	553"	46' - 1"	14.05	794.5"	66' - 2.5"	20.18	1036"	86' - 4"	26.31
75.75"	6' - 3.75"	1.92	317.25"	26' - 5.25"	8.06	558.75"	46' - 6.75"	14.19	800.25"	66' - 8.25"	20.33	1041.75"	86' - 9.75"	26.46
81.5"	6' - 9.5"	2.07	323"	26' - 11"	8.2	564.5"	47' - 0.5"	14.34	806"	67' - 2"	20.47	1047.5"	87' - 3.5"	26.61
87.25"	7' - 3.25"	2.22	328.75"	27' - 4.75"	8.35	570.25"	47' - 6.25"	14.48	811.75"	67' - 7.75"	20.62	1053.25"	87' - 9.25"	26.75
93"	7' - 9"	2.36	334.5"	27' - 10.5"	8.5	576"	48'	14.63	817.5"	68' - 1.5"	20.76	1059"	88' - 3"	26.9
98.75"	8' - 2.75"	2.51	340.25"	28' - 4.25"	8.64	581.75"	48' - 5.75"	14.78	823.25"	68' - 7.25"	20.91	1064.75"	88' - 8.75"	27.04
104.5"	8' - 8.5"	2.65	346"	28' - 10"	8.79	587.5"	48' - 11.5"	14.92	829"	69' - 1"	21.06	1070.5"	89' - 2.5"	27.19
110.25"	9' - 2.25"	2.8	351.75"	29' - 3.75"	8.93	593.25"	49' - 5.25"	15.07	834.75"	69' - 6.75"	21.2	1076.25"	89' - 8.25"	27.34
116"	9' - 8"	2.95	357.5"	29' - 9.5"	9.08	599"	49' - 11"	15.21	840.5"	70' - 0.5"	21.35	1082"	90' - 2"	27.48
121.75"	10' - 1.75"	3.09	363.25"	30' - 3.25"	9.23	604.75"	50' - 4.75"	15.36	846.25"	70' - 6.25"	21.49	1087.75"	90' - 7.75"	27.63
127.5"	10' - 7.5"	3.24	369"	30' - 9"	9.37	610.5"	50' - 10.5"	15.51	852"	71'	21.64	1093.5"	91' - 1.5"	27.77
133.25"	11' - 1.25"	3.38	374.75"	31' - 2.75"	9.52	616.25"	51' - 4.25"	15.65	857.75"	71' - 5.75"	21.79	1099.25"	91' - 7.25"	27.92
139"	11' - 7"	3.53	380.5"	31' - 8.5"	9.66	622"	51' - 10"	15.8	863.5"	71' - 11.5"	21.93	1105"	92' - 1"	28.07
144.75"	12' - 0.75"	3.68	386.25"	32' - 2.25"	9.81	627.75"	52' - 3.75"	15.94	869.25"	72' - 5.25"	22.08	1110.75"	92' - 6.75"	28.21
150.5"	12' - 6.5"	3.82	392"	32' - 8"	9.96	633.5"	52' - 9.5"	16.09	875"	72' - 11"	22.22	1116.5"	93' - 0.5"	28.36
156.25"	13' - 0.25"	3.97	397.75"	33' - 1.75"	10.1	639.25"	53' - 3.25"	16.24	880.75"	73' - 4.75"	22.37	1122.25"	93' - 6.25"	28.51
162"	13' - 6"	4.11	403.5"	33' - 7.5"	10.25	645"	53' - 9"	16.38	886.5"	73' - 10.5"	22.52	1128"	94'	28.65
167.75"	13' - 11.75"	4.26	409.25"	34' - 1.25"	10.39	650.75"	54' - 2.75"	16.53	892.25"	74' - 4.25"	22.66	1133.75"	94' - 5.75"	28.8
173.5"	14' - 5.5"	4.41	415"	34' - 7"	10.54	656.5"	54' - 8.5"	16.68	898"	74' - 10"	22.81	1139.5"	94' - 11.5"	28.94
179.25"	14' - 11.25"	4.55	420.75"	35' - 0.75"	10.69	662.25"	55' - 2.25"	16.82	903.75"	75' - 3.75"	22.96	1145.25"	95' - 5.25"	29.09
185"	15' - 5"	4.7	426.5"	35' - 6.5"	10.83	668"	55' - 8"	16.97	909.5"	75' - 9.5"	23.1	1151"	95' - 11"	29.24
190.75"	15' - 10.75"	4.85	432.25"	36' - 0.25"	10.98	673.75"	56' - 1.75"	17.11	915.25"	76' - 3.25"	23.25	1156.75"	96' - 4.75"	29.38
196.5"	16' - 4.5"	4.99	438"	36' - 6"	11.13	679.5"	56' - 7.5"	17.26	921"	76' - 9"	23.39	1162.5"	96' - 10.5"	29.53
202.25"	16' - 10.25"	5.14	443.75"	36' - 11.75"	11.27	685.25"	57' - 1.25"	17.41	926.75"	77' - 2.75"	23.54	1168.25"	97' - 4.25"	29.67
208"	17' - 4"	5.28	449"	37' - 5.5"	11.42	691"	57' - 7"	17.55	932.5"	77' - 8.5"	23.69	1174"	97' - 10"	29.82
213.75"	17' - 9.75"	5.43	455.25"	37' - 11.25"		696.75"	58' - 0.75"	17.7	938.25"	78' - 2.25"	23.83	1179.75"	98' - 3.75"	29.97
219.5"	18' - 3.5"	5.58	461"	38' - 5"	11.71	702.5"	58' - 6.5"	17.84	944"	78' - 8"	23.98	1185.5"	98' - 9.5"	30.11
225.25"	18' - 9.25"	5.72	466.75"	38' - 10.75"	11.86	708.25"	59' - 0.25"	17.99	949.75"	79' - 1.75"	24.12	1191.25"	99' - 3.25"	30.26
231"	19' - 3"	5.87	472.5"	39' - 4.5"	12	714"	59' - 6"	18.14	955.5"	79' - 7.5"	24.27	1197"	99' - 9"	30.4
236.75"	19' - 8.75"	6.01	478.25"	39' - 10.25"		719.75"	59' - 11.75"	18.28	961.25"	80' - 1.25"	24.42	1202.75"	100'-2.75"	30.54
242.5"	20' - 2.5"	6.16	484"	40' - 4"	12.29	725.5"	60' - 5.5"	18.43	967"	80' - 7"	24.56	1208.50"	100'-8.5"	30.69
248.25"	20' - 8.25"	6.31	489.75"	40' - 9.75"	12.44	731.25"	60' - 11.25"	18.57	972.75"	81' - 0.75"	24.71	1214.25"	101'-2.25	30.84
254"	21' - 2"	6.45	495.5"	41' - 3.5"	12.59	737"	61' - 5"	18.72	978.5"	81' - 6.5"	24.85	1220"	101'-8.0"	30.98
259.75"	21' - 7.75"	6.6	501.25"	41' - 9.25"	12.73	742.75"	61' - 10.75"	18.87	984.25"	82' - 0.25"	25	1225.75"	102'-1.75"	31.13
265.5"	22' - 1.5"	6.74	507"	42' - 3"	12.88	748.5"	62' - 4.5"	19.01	990"	82' - 6"	25.15	1231.5"	102'-7.5"	31.28
271.25"	22' - 7.25"	6.89	512.75"	42' - 8.75"	13.02	754.25"	62' - 10.25"	19.16	995.75"	82' - 11.75"	25.29	1237.25"	103'-1.25"	31.42
277"	23' - 1"	7.04	518.5"	43' - 2.5"	13.17	760"	63' - 4"	19.3	1001.5"	83' - 5.5"	25.44	1243"	103'-7"	31.57

#### Standard Height (with common thickness)

	Thickness			60	MM					Thickness			80	MM		
Height	THURNIGSS		PUF Slab		A	lu. Checke	red	Hei	jht	THICKIICSS		PUF Slab		A	lu. Checkei	red
	Wall Panel	Inch	Feet	Meter	Inch	Feet	Meter			Wall Panel	Inch	Feet	Meter	Inch	Feet	Meter
St. Height-1	92.5	94.9	7'-10.9"	2.4101	97.2	8'-1.2"	2.47	St. Hei	ght-1	92.5	95.6	7'-11.6"	2.43	98.8	8'-2.8"	2.51
St. Height-2	112	114.4	9'-6.4"	2.91	116.7	9'-8.7"	2.96	St. Hei	ght-2	112	115.1	9'-7.1"	2.92	118.3	9'-10.3"	3
Maximum single panel	240	242.2	20'-2.4"	6.1576	244.7	20'-4.7"	6.22	Maxim single		240	243.1	20'-3.1"	6.18	246.3	20'-6.3"	6.26

					MM				Thickness			125	MM		
Height	THICKIESS		<b>PUF Slab</b>		A	Alu. Checkered		Height	THICKIESS		PUF Slab	)	A	lu. Checke	red
	Wall Panel	Inch	Feet	Meter	Inch	Feet	Meter		Wall Panel	Inch	Feet	Meter	Inch	Feet	Meter
St. Height-1	92.5	96.4	8'-0.4"	2.45	100.4	8'-4.4"	2.55	St. Height-1	92.5	97.4	8'-1.4"	2.48	102.3	8'-6.3"	2.60
St. Height-2	112	115.9	9'.7.9"	2.94	119.9	9'-11.9"	3.05	St. Height-2	112	116.9	9'.8.9"	2.97	121.8	10'-1.8"	3.09
Maximum	240	243.9	20'-3.9"	6.20	247.9	20'-7.9"	6.30	Maximum	240	244.9	20'-4.9"	6.22	249.8	20'-9.8"	6.35
single panel	240	2-0.0	20-0.5	0.20	271.3	20-1.5	0.00	single panel	2-10	274.3	20 4.5	0.22	2-13.0	20-3.0	0.00

	Thickness			150	MM		
Height	THICKIGSS		<b>PUF Slab</b>		A	lu. Checke	red
	Wall Panel	Inch	Feet	Meter	Inch	Feet	Meter
St. Height-1	92.5	98.4	8'-2.4"	2.50	104.3	8'-8.3"	2.65
St. Height-2	112	117.9	9'-9.9"	2.99	123.8	10'-3.8"	3.14
Maximum single panel	240	245.9	20'-5.9"	6.25	251.8	20'-11.8"	6.40

Value Ē

Value Þ

Conductivity Transmittance Resistance Transmittance Resistance

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Thermal

Thermal

Thermal

Thermal

Thermal

Weight

Recomm -ended Temp. Degree @ 32°C

PUF Thickness (mm)

(mm)					L			Value	Value			Value	Value
		Wall &	Wall & Celling		Floor	Floor Panel							
HA H	Ambient		D	Floor b	Floor bare slab	Alu. Checkered Floor	red Floor	W/mK	W/m <sup>-</sup> K				m <sup>-</sup> K/K.Cal
≞	lemp.	Kg/Sq.ft	Kg/Sq.ft Kg/Sq.mtr	Kg/Sq.ft	Kg/Sq.mtr	Kg/Sq.ft	Kg/Sq.mtr						
+20	+20 to +2	1.5	16	0.25	က	2.5	27	0.022	0.3521		2.84	0.3018	3.31
+2 t	+2 to -8	1.6	17	0.35	4	2.6	28	0.022	0.2679		3.73	0.2296	4.36
-8 to	-8 to -18	1.7	18	0.425	5	2.7	29	0.022	0.2163		4.62	0.1854	5.39
-18	-18 to -27	1.85	20	0.525	9	2.85	31	0.022	0.1721		5.81	0.1475	6.78
-27 t	-27 to -50	C)	22	0.65	7	ო	32	0.022	0.1459		6.85	0.1251	7.99
				Therm	al Tran	ermal Transmittance 'U' Value	ce 'U' V	/alue					
				W/m²K						K.cal / m²K	×		
Panel Thickness (mm)	60		80	100	125	150	60		80	100	-	125	150
Temp. Difference <sup>o</sup> C													
	0.3521		0.2679 (	0.2163	0.1721	0.1459	0.3018	18	0.2296	0.1854	0	0.1475	0.1251
	3.5205		2.6797	2.1631	1.7556	1.4596	3.0174	74	2.2968	1.8540	-	1.5047	1.2510
	5.2808		4.0196	3.2446	2.6335	2.1894	4.5262	62	3.4452	2.7810		2.2572	1.8766
	7.0411		5.3595	4.3262	3.5113	2.9192	6.0349	49	4.5936	3.7080	с С	3.0095	2.5021
	8.8014		6.6993	5.4077	4.3891	3.6491	7.5437	37	5.7419	4.6350	с С	3.7619	3.1276
	10.5617		8.0391 (	6.4893	5.2670	4.3789	9.0524	24	6.8903	5.5620	4	4.5143	3.7531
	12.3219		9.3790	7.5708	6.1447	5.1087	10.5611	611	8.0387	6.4890		5.2667	4.3786
	14.0822		10.7189 8	8.6524	7.0226	5.8384	12.0699	399	9.1871	7.4159	9	6.0191	5.0041
	15.8424		12.0587	9.7340	7.9004	6.5682	13.5786		10.3356	8.3430	9	6.7714	5.6296
	17.6028		13.3986 1	10.8155	8.7782	7.2980	15.0873		11.4840	9.2699	7	7.5238	6.2551
	19.3631		14.7385 1	11.8971	9.6561	8.0278	16.5961	961	12.6324	10.1970		8.2762	6.8806
	21.1239		16.0784 1	12.9786	10.5339	8.7576	18.1053		13.7808	11.1239		9.0286	7.5062
	22.8836		17.4182 1	14.0602	11.4117	9.4874	19.6135		14.9292	12.0510		9.7810	8.1317
	24.6439		18.4382 1	15.1417	12.2896	10.2172	21.1223		15.8034	12.9779		10.5334	8.7572
	28.1644		21.4377 1	17.3048	14.0452	11.6769	24.1397		18.3743	14.8320		12.0382	10.0082



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11



## **Technical Specifications of Puf Panels**

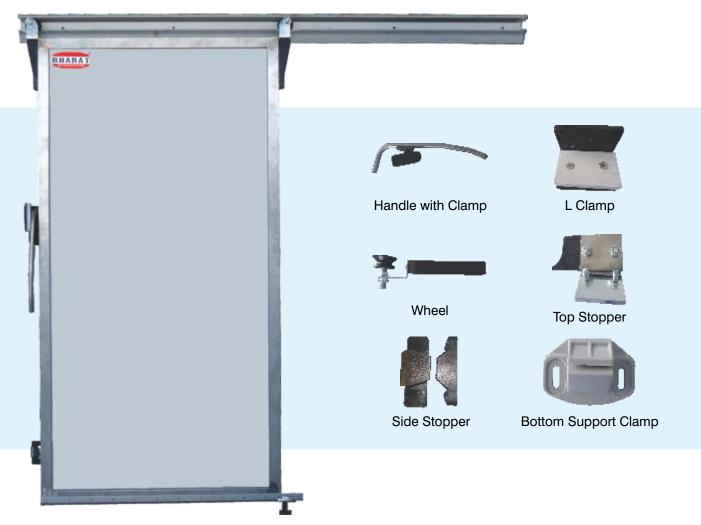
	inical opecifications of 1 di					
Sr.No.	PARAMETERS	DESCRIPTION				
1	Average PUF Density	$40 \pm 2 \text{ Kg/ cu.mtr/ m}^{3}$				
2	PUF Blowing Agent	141B (CFC free)				
3	Insulation Material	Polyurethane foam				
4	Temperature range	+90°C to -60°C				
5	Panel Type	Discontinuous type with camlock				
6	M.O.C. Of Cam locks	Cam locks body material HIPS and male latch is made of nylon Glass field with GI sheet reinforcement. Cam-lock panel joints easy assembly and leakage resistant, panel-to-panel joints.				
7	Type of Panel joints	Tongue & Groove Joint with Cam lock and all side rubber gaskets				
8	Corner Panel Available	12" x 12" x 162" (maximum Length)				
9	Length of Wall & ceiling Panel	2032 mm to 12000 mm 80" to 472.5" inch				
10	Ceiling Suspension items with specs	MS bolt with thermal breaking cap. 4 mm thickness X 80 x 80 mm Aluminium/MS washer plate for load distribution Anchor bolt (MS) hanging bolt with 40 mm washer 2.0 mm thickness Sealing to panel MS road Clamp with an insulated crown.				
11	Closed cell content	90 to 95%				
12	Vapour Permeability	5.5mg/PASM				
13	Water Absorption	Less than 2%				
14	Fire Grade of Polyurethane Panel	FR Grade B2 (Fire Resistant Grade)				
15	Compressive Strength at 10% Deformation	0.21 N/ sq.mm (For PUF only)				
16	Tensile Strength	0.58 N /sq.mm (For PUF only)				
17	Adhesive Strength (Foam to Sheet)	2.9 kg /sq.mtr				
18	Dimension Stability	Less than 2%				
19	Panel Facing Availability	With Rib or plain on Demand (Ribs are provided for more strength)				
20	Wall & Celling Panel facing Material	<ul> <li>Pre Painted Galvanised sheet , Thickness 0.50mm</li> <li>Plain Galvanised sheet , Thickness 0.50mm</li> <li>S.S. Sheet, Grade 316, 0.50mm, finish 2B/0.6 mm mate No.4</li> <li>S.S. Sheet, Grade 304, 0.50mm, finish 2B/0.6 mm mate No.4</li> </ul>				
21	Floor Panel Facing Material	<ul> <li>PUF Panel with both side tarfelt sheet.</li> <li>PUF Panel with both side 0.5mm GIPP sheet.</li> <li>PUF Panel with outside GIPP sheet, inside 9 mm thick marine ply with 2 mm thick Aluminium Checkered Plate</li> </ul>				
22	Specification for Colour Coating Top (First) Coating Privar Coating Pre-treatment Coating Dire Coating Dire	<ul> <li>A. RAL No. : 9002/9003 or it's nearest</li> <li>B. Indian Standard code Colour Coating : IS 14246 Galvanizing : IS 277 Base Metal : IS 513</li> <li>C. Organic Coating : Type RMP (Polyester)</li> <li>D. Zinc Coating : 120 GSM</li> <li>E. Top Primer (Thickness in micron 'μ') : 5 +/- 1 μ</li> <li>F. Top Coat (Thickness in micron 'μ') : 20 +/- 1 μ</li> <li>G. Back Primer (Thickness in micron 'μ') : 4 +/- 1 μ</li> <li>H. Back Coat (Thickness in micron 'μ') : 4 +/- 1 μ</li> <li>I. Guard Film (Thickness in micron 'μ') : 40 +/- 3 μ</li> <li>J. Salt Spray Test /Humidity Test : 750 hrs. /1000 hrs.</li> </ul>				



**BHARAT** Sliding Doors are delivered as complete units easy to mount with all fittings, sliding rail, and bottom guide roller etc. Sliding Doors are designed for tough commercial environments such as Cold Stores, Incubation Chamber, Blast Chiller.

**BHARAT** Sliding Doors are very easy to operate, greater in efficiency, better in performance. Also, in terms of safety, long service Life, and smooth in operation every day with one hand.

ICE MAKE Sliding Door sealed upper surface with resist dirt built up, very easy to clean, and very easy to close and reliably opens with advance technology.



#### **Bharat Sliding Doors Features:**

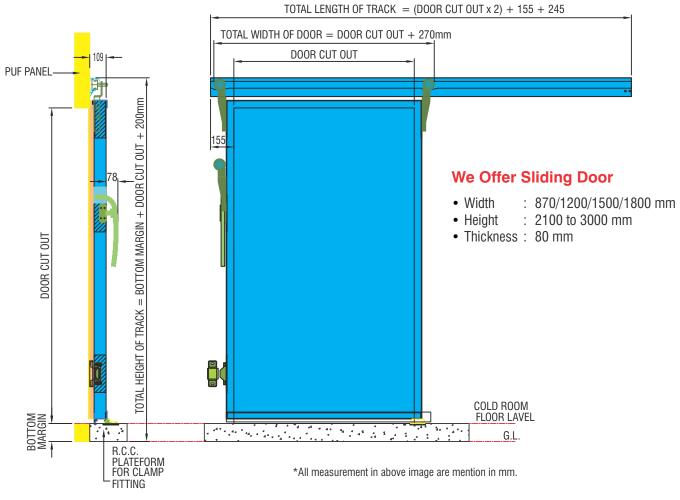
- Heavy duty imported hardware
- Formed in place door panels
- S.S door frame
- · Heavy duty track and wheel for durability
- Door guide to keep door on track
- Gasket to seal off air leak
- Durable and long service life, corrosion- and Wear-resistant
- Easy maintenance & robust in design
- Outstanding ease of operation by manual
- · High standard of hygiene and easy-to-clean surfaces

## **SLIDING DOOR**



#### **Technical Specifications**

Door Panel	80 mm thick (rigid Polyurethane foam)
Door Frames	Assembly in Panel
Surface Finish	The surface finish is available in a range of RAL No. 9002/9003 or its nearest colours, with Pre-painted sheet, S.S sheet (304/316), GI Plain Sheet, Galvanium with thickness of 0.50 mm.
Insulation	<ul> <li>Injected Polyurethane insulation with,</li> <li>Thermal Conductivity 0.022 W/mK</li> <li>Density 40 ± 2 kg/cu/mtr/m<sup>3</sup></li> <li>Tensile Strength 0.58 n/sq. mm</li> <li>Vapour permeability 5.5 mg/PASM</li> </ul>
Hardware	<ul> <li>Anodized Aluminum Upper Guide rail</li> <li>Availability of floor (F) guide Clamp</li> <li>Brackets in reinforced composite material and zinc-coated metal</li> <li>Outside opening devices with lever handle</li> <li>Mounting on pre-fabricated panel</li> <li>Simple and quick cleaning surface</li> <li>In Door Leaf with Replaceable Single Gasket</li> </ul>



## **GLASS DOOR DISPLAY CHILLER**

Suitable for super market to display Dairy Items, Cake-Pastry, Chocolates, Beverages, Fruits & Vegetables, Flower, Medicines etc.





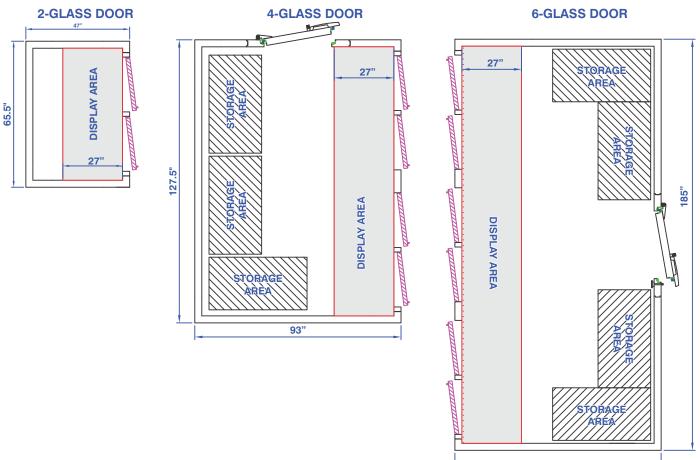
#### **Special Features**

- Large Storage with Better Display Area Temperature retaining
- Customized size

- Easy maintenance
- Energy efficient
  - Easy assemble & dismantle
- **Available Glass Door Display Chiller Size:**

	Displa	y Area		Display with Storage Area						
No. of	Chiller Size	Volume	Connected Power	No. of	Chiller Size	Volume	<b>Connected Power</b>			
Door	(L x W x H)	CFT		Door	(L x W x H)	CFT				
2	65.5" x 47" x 99"	126	1 / 3 Ph, 1.58 Kw	2	65.5" x 93" x 99"	269	1 / 3 Ph, 1.68 Kw			
3	98.75" x 47" x 99"	201	1 / 3 Ph, 1.68 Kw	3	98.75" x 93" x 99"	429	1 / 3 Ph, 1.68 Kw			
4	127.5" x 47" x 99"	264	1 / 3 Ph, 1.68 Kw	4	127.5" x 93" x 99"	563	1 / 3 Ph, 2.17 Kw			
5	156.25" x 58.5" x 99"	419	1 / 3 Ph, 2.17 Kw	5	156.25" x 93" x 99"	696	3 Ph, 3.26 Kw			
6	185" x 58.5" x 99"	499	1 / 3 Ph, 2.17 Kw	6	185" x 93" x 99"	829	3 Ph, 3.26 Kw			

## **GLASS DOOR DISPLAY CHILLER**



## **Technical Specification**

- Glass door opening size: 711mm x 1956mm
- Customized glass doors (hinged type) with magnetic door gasket for air tight seal
- Floor Insulation: Aluminium Checkered plate
- Digital temperature controller with digital display
- Insulated perimeter frames designed with forward facing for easier servicing and maintenance from front of
  the door
- Energy efficient frame that reduce energy to the frame by 30% with added insulation resulting in the same
- · Double layer vaccumized tempered glass for moisture.
- Adjustable shelving system for specific arrangement of products.
- Provision for special demands such as glass doors, special floor, silent condensing unit, shelving system, etc.
- · Long durable and perfect construction with balanced refrigeration system



93"



#### **Condensing Unit**



- High cooling with low power consumption
- Designed for high ambient condition up to 55°c
- Condensing coil with inner grooved copper tubes & aluminum fins
- · Efficient fans with external motors for single phase and three phase
- High & low pressure cut-out including mounting brackets, wired to terminal strip
- Large size filter drier, moisture indicator, solenoid valve, oil separator and accumulator
- Shell & tube type condenser with high cooling and capacity for high ambient conditions

## **Rack System - An Advance Refrigeration Technology :**

- It's advance power saving system compare to normal refrigeration system
- Rack system will work as per product load variation





#### **REFRIGERATION SYSTEM**



#### **Evaporator Unit**



#### FEATURES

- Fan High reliability, lower temperature resistance and low noise external rotor fans.
- **Coil** High efficiency heat exchange with in line tube system for minimum loss of air flow between fans and large surface area for better cooling.
- **Defrost** Use electrical heating stainless steel pipe, high leak proofness at the and anti-electrical leakage and long life.
- Unit Body Aluminium, PU type Powder Coated, Corrosion resistant and nice appearance body.
- Maintenance Compact, adjustable & easy open able side panels for easy installation.

#### **Control Panel**



#### Features

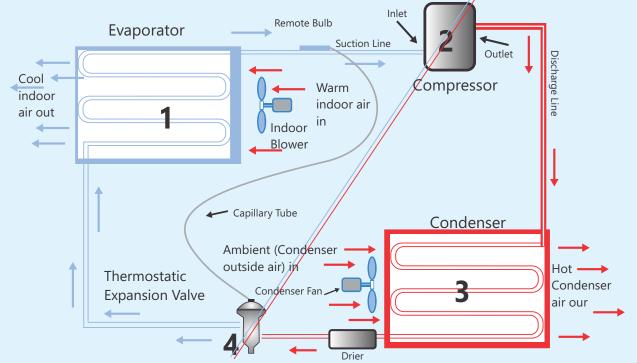
- Temperature Controls
- Phase Preventing
- HP-LP
- Over current protection
- Auto Defrost
- Delay timer



#### **Features**

- Phase Preventing
- HP/LP
- Over/Under current protection
- High-Low temperature alarm
- Quick freezing option
- Door alarm
- All type of trip alarm & Record date
- Available in Air & Water cooled system

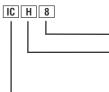
## **Refrigeration Cycle**



## **REFRIGERATION SYSTEM**



#### **Model Code Logic**



Capacity BTU / Hr.

Temperature

HH- High Temperature with humidity (2°C to 18°C) L- Low Temperature (-18°C to -28°C), M-Medium Temperature (-2°C to -8°C),

H-High Temperature (2°C to 18°C), LL- Ultra Low Temperature (-30°C to -40°C)

► ICEMAKE

#### **REFRIGERATION TECHNICAL DATA**

Sr. No	Model	Cold Volu	Room ume	Su	Suggested (		ed Cooling Capacity		Connected	Power	Cond	ensor	Refriç	gerant	Com	presso	т Туре
		CFT	СМТ	Watts	H.P.	Kcal	BTU	TR	Load	Supply	Air Cooled	Water Cooled	R-404	R-22	Reci procating	Scroll	Semi Sealed
							FOR HIG	H TEM	PERATURE	@ 2ºC T	0 8ºC						
1	ICH-8	300	8	2198	2.95	1890	7500	0.62	1.8	1 PH	Yes	No	No	Yes	Yes	No	No
2	ICH-12	500	14	3443	4.62	2961	11748	0.98	2.6/1.93	1/3 PH	Yes	Optional	Yes	Yes	Yes	No	YES
3	ICH-17	650	18	4899	6.57	4213	16715	1.39	3.1/2.63	1/3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
4	ICH-20	900	25	5634	7.55	4845	19223	1.60	3.08	3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
5	ICH-23	1100	31	7630	10.23	6562	26034	2.17	4.03	3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
6	ICH-40	1900	54	12146	16.28	10446	41442	3.45	6.11	3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
7	ICH-53	2400	68	15776	21.15	13567	53828	4.48	7.9	3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
8	ICH-71	3200	91	20357	27.29	17507	69458	5.78	10.14	3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
9	ICH-85	4000	113	25420	34.08	21861	86733	7.22	12.51	3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
10	ICH-100	5200	147	29886	40.06	25702	101971	8.49	14.89	3 PH	Yes	Optional	Yes	Yes	No	Yes	YES
11	ICH-145	7000	198	42391	56.82	36456	144638	12.04	21.91	3 PH	Yes	Optional	Yes	Yes	No	Yes	YES
12	ICH-175	9000	255	51390	68.89	44195	175343	14.60	25.61	3 PH	Yes	Optional	Yes	Yes	No	Yes	YES
13	ICH-210	11000	311	62586	83.90	53824	213543	17.78	32.86	3 PH	Yes	Optional	Yes	Yes	No	Yes	YES
						FC	R MEDI	UM TEN	IPERATURE	@ -2ºC	TO -8°C						
14	ICM-4	250	7	1250	1.68	1075	4265	0.36	1.31	1 PH	Yes	No	No	Yes	Yes	No	No
15	ICM-9	450	13	2751	3.69	2366	9386	0.78	2.4/1.8	1/3 PH	Yes	Optional	Yes	Yes	Yes	No	YES
16	ICM-12	600	17	3813	5.11	3279	13010	1.08	2.8/2.51	1/3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
17	ICM-15	800	23	4620	6.19	3973	15763	1.31	3	3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
18	ICM-17	1000	28	4778	6.40	4109	16303	1.36	3.92	3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
19	ICM-28	1700	48	7875	10.56	6773	26870	2.24	4.88	3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
20	ICM-40	2200	62	11722	15.71	10081	39995	3.33	7.48	3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
21	ICM-53	2900	82	15739	21.10	13536	53701	4.47	9.79	3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
22	ICM-65	3750	106	20153	27.01	17332	68762	5.73	11.83	3 PH	Yes	Optional	Yes	Yes	Yes	Yes	YES
23	ICM-80	4700	133	23950	32.10	20597	81717	6.80	14.24	3 PH	Yes	Optional	Yes	Yes	No	Yes	YES
24	ICM-112	6400	181	33530	44.95	28836	114404	9.53	21.16	3 PH	Yes	Optional	Yes	Yes	No	Yes	YES
25	ICM-135	8100	229	39750	53.28	34185	135627	11.29	24.55	3 PH	Yes	Optional	Yes	Yes	No	Yes	YES
26	ICM-210	9000	255	46600	62.47	40076	158999	13.24	31.68	3 PH	Yes	Optional	Yes	Yes	No	Yes	YES



Sr.		Cold I Volu	Room ime	S	uggestec	l Cooling	Capacit	y	Connected	Power	Cond	ensor	Refrig	jerant	Com	ipressoi	r Type
No	Model	CFT	СМТ	Watts	H.P.	Kcal	BTU	TR	Load	Supply	Air Cooled	Water Cooled	R-404	R-22	Reci procating	Scroll	Semi Sealed
						F	OR LOW	TEMPE	Rature @	-18⁰C T	0 -28ºC						
27	ICL-3	300	8	550	0.74	473	1877	0.16	2.5	1 PH	Yes	No	Yes	No	Yes	No	No
28	ICL-4	350	10	1145	1.53	985	3907	0.33	1.98	3 PH	Yes	No	Yes	No	Yes	YES	No
29	ICL-6	550	16	1788	2.40	1538	6101	0.51	3	3 PH	Yes	Yes	Yes	No	Yes	YES	Yes
30	ICL-9	850	24	2743	3.68	2359	9359	0.78	4.1	3 PH	Yes	Yes	Yes	No	Yes	YES	Yes
31	ICL-13	1200	34	3328	4.46	2862	11355	0.95	5.4	3 PH	Yes	Yes	Yes	No	Yes	YES	Yes
32	ICL-18	1700	48	4743	6.36	4079	16183	1.35	6.9	3 PH	Yes	Yes	Yes	No	Yes	YES	Yes
33	ICL-26	2500	71	7960	10.67	6846	27160	2.26	8.6	3 PH	Yes	Yes	Yes	No	Yes	YES	Yes
34	ICL-38	3400	96	11355	15.22	9765	38743	3.23	10.6	3 PH	Yes	Yes	Yes	No	No	YES	Yes
35	ICL-42	3800	107	10870	14.57	9348	37088	3.09	11.5	3 PH	Yes	Yes	Yes	No	No	YES	Yes
36	ICL-45	4000	113	12745	17.08	10961	43486	3.62	13.5	3 PH	Yes	Yes	Yes	No	No	No	Yes
37	ICL-50	5000	141	15390	20.63	13235	52511	4.37	15.18	3 PH	Yes	Yes	Yes	No	No	No	Yes
38	ICL-65	6500	184	18690	25.05	16073	63770	5.31	20.29	3 PH	Yes	Yes	Yes	No	No	No	Yes
30	ICL-80	8000	226	21875	29.32	18813	74638	6.21	23.65	3 PH	Yes	Yes	Yes	No	No	No	Yes
40	ICL-105	10500	297	27810	37.28	23917	94888	7.90	32.4	3 PH	Yes	Yes	Yes	No	No	No	Yes
			F	OR HIGH	TEMPE	RATURE	@ 2°C	TO 18º0	WITH HUN	NIDITY	FOR RIP	ENING /	PRE - CO	DOLING			
41	ICHH-12	1200	34	5107	6.85	4392	17425	1.45	2.03	1/3 PH	Yes	No	Yes	Yes	Yes	Yes	YES
42	ICHH-17	1500	42	5033	6.75	4328	17173	1.43	2.53	3 PH	Yes	Yes	Yes	Yes	Yes	Yes	YES
43	ICHH-20	1700	48	8125	10.89	6988	27723	2.31	3.27	3 PH	Yes	Yes	Yes	Yes	Yes	Yes	YES
44	ICHH-23	2200	62	10930	14.65	9400	37293	3.11	4.02	3 PH	Yes	Yes	Yes	Yes	Yes	Yes	YES
45	ICHH-40	3500	99	17648	23.66	15177	60215	5.01	6.15	3 PH	Yes	Yes	Yes	Yes	Yes	Yes	YES
46	ICHH-53	4500	127	22869	30.66	19667	78029	6.50	8.13	3 PH	Yes	Yes	Yes	Yes	Yes	Yes	YES
47	ICHH-71	7000	198	29769	39.90	25601	101572	8.46	10.45	3 PH	Yes	Yes	Yes	Yes	Yes	Yes	YES
48	ICHH-85	8000	226	38056	51.01	32728	129847	10.81	12.97	3 PH	Yes	Yes	Yes	Yes	Yes	Yes	YES
						FOF	R ULTRA	LOW T	EMPERATUR	RE -30°C	с то -40°	C					
49	ICLL-17			5100	6.84	4386	17401	1.45	5.82	3 PH	Yes	Yes	Yes	No			Yes
50	ICLL-24	-	-	7673	10.29	6599	26180	2.18	7.63	3 PH	Yes	Yes	Yes	No		2	Yes
51	ICLL-39			12025	16.12	10342	41029	3.42	12.26	3 PH	Yes	Yes	Yes	No	vn et		Yes
52	ICLL-55	h o o		16185	21.70	13919	55223	4.60	15.57	3 PH	Yes	Yes	Yes	No	led ty		Yes
53	ICLL-64	and tood	e ha	19215	25.76	16525	65562	5.46	18.43	3 PH	Yes	Yes	Yes	No	semi sealed two starre		Yes
54	ICLL-72	c	0	22315	29.91	19191	76139	6.34	21.05	3 PH	Yes	Yes	Yes	No	mas		Yes
55	ICLL-86			27135	36.37	23336	92585	7.71	25.5	3 PH	Yes	Yes	Yes	No			Yes

\* Connected load will be different in different compressor

## **EVAPORATOR MANUAL**





A4005-301H, A4007-301H A7009-301A, A7012-301A



A4012-302H, A7021-302A



A4018-303H, A7032-303A



A4024-353H, A4034-353H A7043-353A, A7060-353A



A4039-452H, A7062-452A



A4058-453H, A7090-453A



CLS709-252A

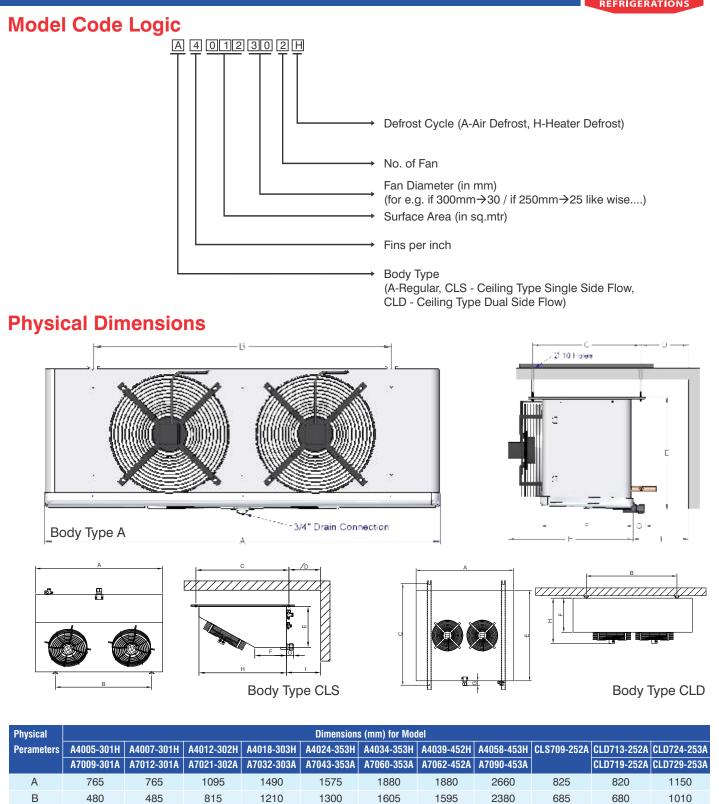


CLD713-252A, CLD719-252A



CLD724-253A, CLD729-253A

## **EVAPORATOR MANUAL**



NA

NA

NA

NA

NA

NA

NA

B1

С

D

Е

F

G

Н

I Unit Weight (kg) NA

NA

NA

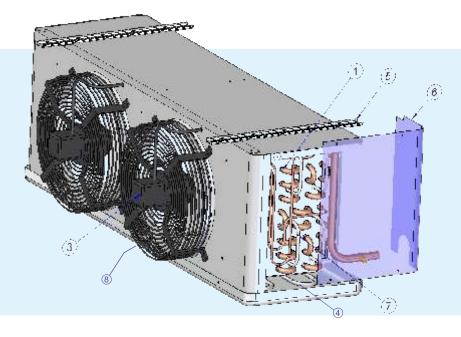
NA

## **EVAPORATOR MANUAL**



#### **Features**

- 1) High efficiency heat exchanger with in line tube system for minimum loss of air flow between fins and with large surface area for long cooling time.
- 2) Fan Motor and Heater wires are connected in terminal box mounted inside the unit.
- 3) Fan motors are from leading brand. Insulation Class F, thermally protected against overload and can be used on 230V/50 Hz supplies.
- 4) Provision given for install tray heater later.
- 5) Stainless steel mounting rail.
- 6) Compact, adjustable & easy openable side panels for easy installation.
- 7) Heater rods arranged for best heat distribution in coil. Electric heater rods are inserted into special aluminium sleeve tubes to avoid steam formation.
- 8) Drainage Connection



#### **Unit Body :**

- Aluminium 1.2mm thick, putype white powder coated, corrosion resistant and nice appearance body.
- Round corner Drain tray and also provided intermediate sheet to avoid condensation.
- Aluminium Die cast, threaded, 3/4" diameter drainage connection.

#### Finned coil block:

- Aluminium fin, thickness 0.30 mm
- Shedder Valve provided for gas charging.
- Coils are degreased, cleaned and tested with air 25 bar over-pressure and leak test under water according to standard.

#### Fan Motor:

- Axial fans with external rotor motor, single phase motor 230 V, 50/60 Hz with internally wired thermal contact, wired with internal terminal box.
- Electrical design according to standard.
- Protection class: IP-54, Insulation Class F
- Application range : -35°c to +40°c

#### **Defrost Heating:**

• Electric heater rods 230 V sleeve tube dia – 7-8mm



#### **Technical Specifications**

	EVAPORATOR UNIT (Evap. Temp8°C to -35°C)									
Sr. NO	PARAMETERS/MODEL	A4005-301H	A4007-301H	A4012-302H	A4018-303H	A4024-353H	A4034-353H	A4039-452H	A4058-453H	
1	Capacity (KW) (at $-25^{\circ}$ C, DT1 = 7 K)	0.95	1.25	2.5	3.8	5.0	6.8	8.27	11.7	
2	Heat Transfer Area (Sq. Mtr)	5.4	6.9	12.15	18.23	24.3	34	39.12	58.12	
3	Tube Volume (In Ltr)	2.1	2.5	3.4	5	7	10.21	10.5	15.5	
4	Fin Spacing-mm/FPI(Fin Per Inch)	4/6	4/6	4/6	4/6	4/6	4/6	4/6	4/6	
5	Fan Diameter & No. of Fans	300/1	300/1	300/2	300/3	350/3	350/3	450/2	450/3	
6	Air Flow (m3 /h) / Throw(Mtr)	1560/9	1560/9	3120/9	4680/10	8200/12	8200/12	8600/14	12900/14	
7	Motor - Input Value (watts)	87 x 1	87 x 1	87 x 2	87 x 3	150 X 3	150 X 3	320 x 2	320 x 3	
8	Motor - Current (Amp.)	0.42 x 1	0.42 x 1	0.42 x 2	0.42 x 3	0.65 x 3	0.65 x 3	0.74 x 2	0.74 x 3	
9	Pipe Inlet & Outlet	1/2 & 7/8	1/2 & 7/8	1/2 & 7/8	1/2 & 7/8	5/8 & 1.1/8	5/8 & 1.1/8	5/8 & 1.1/8	5/8 & 1.3/8	
10	Coil Heater (watts)	500 x 4	500 x 4	750 x 4	850 x 4	1000 x 4	1000 x 4	1310 x 4	1890 x 4	
11	Tray Heater (watts)	750 x 1	750 x 1	1000 x 1	600 x 2	750 x 2	750 x 2	1310 x 1	1890 x 1	

	EVAPORATOR UNIT (Evap. Temp. 10°C to -8°C)										
Sr. NO	PARAMETERS/MODEL	A7009-301A	A7012-301A	A7021-302A	A7032-303A	A7043-353A	A7060-353A	A7062-452A	A7090-453A		
1	Capacity (KW) (at $-8^{\circ}$ C, DT1 = 8 K)	1.3	1.75	3.5	5.25	7	9.5	13.5	19		
2	Heat Transfer Area (Sq. Mtr)	9.25	12.3	21.3	32.1	42.6	59.5	62.45	90.75		
3	Tube Volume (In Ltr)	2.1	2.5	3.4	5	7	10.21	10.5	15.5		
4	Fin Spacing-mm/FPI(Fin Per Inch)	3.6/7	3.6/7	3.6/7	3.6/7	3.6/7	3.6/7	3.6/7	3.6/7		
5	Fan Diameter & No. of Fans	300/1	300/1	300/2	300/3	350/3	350/3	450/2	450/3		
6	Air Flow (m3/h) / Throw(Mtr)	1560/9	1560/9	3120/9	4680/10	8200/12	8200/12	8600/14	12900/14		
7	Motor - Input Value (watts)	87 x 1	87 x 1	87 x 2	87 x 3	150 X 3	150 X 3	320 x 2	320 x 3		
8	Motor - Current (Amp.)	0.42 x 1	0.42 x 1	0.42 x 2	0.42 x 3	0.65 x 3	0.65 x 3	0.74 x 2	0.74 x 3		
9	Pipe Inlet & Outlet	1/2 & 7/8	1/2 & 7/8	1/2 & 7/8	1/2 & 7/8	5/8 & 1.1/8	5/8 & 1.1/8	5/8 & 1.1/8	5/8 & 1.1/8		

	EVAPORATOR UNIT (Evap. Temp. 10°C to -4°C)											
Sr. NO	PARAMETERS/MODEL	CLS709-252A	CLD713-252A	CLD719-252A	CLD724-253A	CLD729-253A						
1	Capacity (KW) (at $-2^{\circ}$ C, DT1 = 8 K)	1.45	2.35	3.2	5.2	6.1						
2	Heat Transfer Area (Sq. Mtr)	9.76	13.02	19.52	24.4	29.3						
3	Tube Volume (In Ltr)	1.92	2.56	3.84	4.7	5.64						
4	Fin Spacing-mm/FPI(Fin Per Inch)	3.6/7	3.6/7	3.6/7	3.6/7	3.6/7						
5	Fan Diameter & No. of Fans	250/2	250/2	250/2	250/3	250/3						
6	Air Flow (m3/h) / Throw(Mtr)	2000/4	2000/4	2000/4	3000/4	3000/4						
7	Motor - Input Value (watts)	50 x 2	50 x 2	50 x 2	50 x 3	50 x 3						
8	Motor - Current (Amp.)	0.25 x 2	0.25 x 2	0.25 x 2	0.25 x 3	0.25 x 3						
9	Pipe Inlet & Outlet	3/8 & 1/2	3/8 & 1/2	3/8 & 5/8	3/8 & 3/4	3/8 & 3/4						

Air flow (m<sup>3</sup>/h) :- The air flow is determined on a suction side chamber testing stand according to ISO 5801 with dry cooler surface.

Air throw(m) :- The air throw gives the distance from the outlet area of the air cooler at which the average of the air velocity taken at 0.5 m, 0.75 m and 1 m from the ceiling at 20°C equals 0.5 m/s.

**Capacity (kw) :-** The capacity data are based upon measurement according to standard at the following conditions :

- Refrigerant R404A,
- Liquid temperature 30° c resp. 20° c (for evaporating temperatures below -20° c)
- Superheat of refrigerant at the outlet approx. 65% of the air inlet temperature difference.

The selection diagram and the capacity table are already considering the influence of the air humidity and specify the actual capacity of the cooler under operating conditions (wet or frosty cooler surface).



We are providing fully automatic combo type incubation chambers with heating and cooling both process together in single chamber.



**Curd Incubation Chamber** 

#### Are you finding the procedure to produce best quality curd ?

- In our Indian culture, 'dahi' (Gujarati, Marathi, Nepali, Punjabi, Urdu), 'dohi' (Oriya), Mosou (Kannada) or Thayir (Tamil) is the yogurt of India, known for its characteristic, sweet-tart test semi solid consistency. It is also Religiously as well as Scientifically proven good for health.

#### But

- We can't retain its test and quality equal due to variations in Indian weather conditions and slight deviations in procedure.

**So, as a solution of that** we provides you exact methodology with appropriate temperature conditions on basis of our wide experience and some expert's advice



- Stage No.4 and 5 in above method is most important.
- ICE MAKE offers your exact solution for stage No.4 and 5 and of couse for stage No.6 also.
- We offers you Incubation room with hot unit (as shown in photograph above) which can maintain 420C with 10C deviation for stage No.4
- For stage No.5 our Blast Chiller is useful to chill the culture upto 200C within 1 hour.
- At last, for stage No.6 you can use our regular cold Room.

If you will prepare curd according to above procedure, you will get curd with same test & and quality in every season which can maintain its quality for long time and you can prepare delicious Indian Items like Lassi, Raita, Shrikhand, Kari etc.

## **CURD INCUBATION CHAMBER**



Mini Curd Incubation Chamber

Sr. No.	Model	Storage Capacity (Ltr/Batch)	Size (inch)	Body Type	Temperature while Heating	Temperature while Cooling
1	MI-360	360	53" x 44" x 28" ( H x W x D )	Combo - Portable Mini	32°C to 45°C	$-5^{\circ}C$ to $+8^{\circ}C$
2	MI-650	665	80" X 44" X 28" ( H x W x D )	Combo - Portable Mini	32°C to 45°C	$-5^{\circ}C$ to $+8^{\circ}C$
3	WI-1200	1250	70" X 70" X 97.22" (W X DX H)	Combo-Walk in Type	32°C to 45°C	$-5^{\circ}C$ to $+8^{\circ}C$
4	WI-2300	2300	93" X 93" X 97.22" (W X D X H)	Combo-Walk in Type	32°C to 45°C	$-5^{\circ}$ C to $+8^{\circ}$ C
5	WI-3700	3700	93" X 144.75" X 97.22" (W X D X H)	Combo-Walk in Type	32°C to 45°C	$-5^{\circ}C$ to $+8^{\circ}C$

## Application : Curd Incubation / Blast Chilling / Storage

- Standard Incubation time is approx. 4 hours but it will depend upon the packing type and loading temperature of curd with a condition that the chamber temperature should be 45°C before loading.
- Standard cooling time is approx. 5 hours but it will depend upon the packing type and loading temperature of curd with a condition that timing will be considered after getting chamber temperature as 2° C.

NOTE : OPTION FOR ONLY INCUBATION IS AVAILABLE FOR ALL UNITS

Unit Weight (kg)

## **RIPENING CHAMBER**

**Bharat Refrigerations** provides most advanced fruits ripening rooms for fruits like mango, banana and papaya. We provide forced draft cooling system for uniform ripening of fruits even in large capacity rooms. We use blended gas system for the purpose of ripening which is acceptable by all world standards. With our system, client has unique advantage of controlling ripening cycle from four to fifteen days! We provide precise gas monitoring system for better storage life of the produce.









#### The essential requirements of an ethylene ripening system are:

• A reasonably air tight room with insulation • A temperature control system for cooling and/ or heating

• An air circulation and ventilation system • Humidity control • An ethylene gas injection system and An electric control system

#### We Offer Ripening Chamber

Manual (Time Based) Semi Automatic & Automatic

We ensure that each ripening chamber is designed bottom up to maintain the precise conditions required by each specific application. Features of our ripening chamber such as,

- · Micro process controlled compatible with computer
- Low Cost and light weight, constructed with PUF-panels
- Low investment and maintenance cost
- · Easy to commission, Swing or Sliding door type
- Ripening capacities from 5 tons to 25 tons for each chamber
- · Moveable from one site to another, expandable
- · Controlled levels of Ethylene, Co2, Temperature, humidity & time
- Energy efficient, uniform, quality ripening
- · Ripening chambers are reliable with energy-efficient refrigeration units

#### **Gas Emission Systems Features**

- Safe
- Flexible system
- Intelligent control
- Independent settings

**Daily Ripening Chart** 

• Programmable

4 Days	18.0°	18.0°	16.5°	15.5°	14.5°			
<b>5</b> Days	16.5°	16.5°	16.5°	16.5°	15.5°	14.5°		
6 Days	16.5°	16.5°	15.5°	15.5°	14.5°	14.5°	<b>14.5</b> °	
7 Days	15.5°	15.5°	15.5°	15.5°	14.5°	14.5°	14.5°	<b>14.5</b> °
8 Days	14.5°	14.5°	14.5°	14.5°	14.5°	14.5°	14.5°	14.5°
1	Days 1	Days 2	Days 3	Days 4	Days 5	Days 6	Days 7	Days 8

#### 2 5 1 3 4 6 Light Green Light Green Yellow with Yellow with Yellow woth Green Full with Light some green Green at Yellow Brown spots Natural First Change Yellow ends Green in colour as a Ready fot Ready for Fully ripened Clear Change market in Ideal colour sale and for with aroma result of ripening in colour ready cold weather for retail sale eating for market in hot weather

#### **Ethylene Exposure:**

Sr.No.	Product Details	Ethylene Concentration (PPM)	Ethylene Exposure Time (Hours)	Ripening Temperature (°C)	Storage Temperature after ripening(°C)
1	Banana	100-150	24-48	15-18	13-14
2	Mango	100	24	20-22	10-13
3	Papaya	100	24-48	20-25	About at 7

## **CHILLING PLANT**



We are leading refrigeration company dealing with the various kind of industrial chillers for end to end solutions. We are Committed to provide best solution to customers, Which fulfill their needs. We have a wide range of air cooled & water cooled chillers. We have an ISO 9001 certified production unit. The range of our chillers 5 Tr. to 200 Tr.

Our chillers are ideal for various industries like Pharmaceuticals, Plastics, Foods & Beverages, Dairy & Milk Processing, Chemical Industries etc.



**Modular Scroll Chiller** 

#### **Chilling Plant Application**



**Dairy & Beverages Applications** 



**Process Industries** 



**Chemical Industries** 



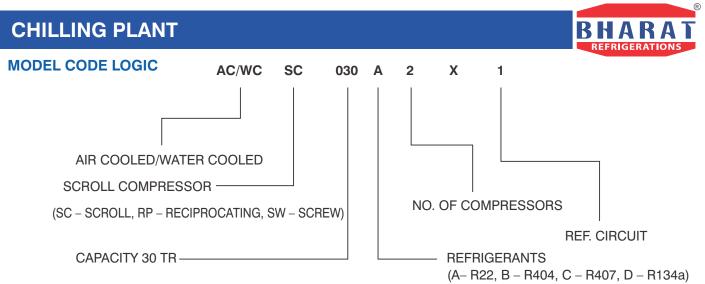
**Mineral Water Applications** 



Pharmaceutical Industries



**Plastic Process Industries** 



Note : No. of Comp. per Ref. Circuit : For Ex. 2X1 –Double Comp. per Single Circuit, 2X2 –Double Comp. per Double Circuit

#### Table - 1 (Scroll Chiller – Air Cooled)

				Refrig	gerant				
Sr.	Model No.	*Capacity	Α	В	С	D	NO.	of Comp.	Per Ref. Circuit
No.		(In Tr.)	R22	R404A	R407A	R134a	Com	o. Qty	Ref. Cct.
01	ACSC005A1/-X1	5	$\checkmark$	OP	OP	OP	1	Х	1
02	ACSC010A1/2X1	10	$\checkmark$	OP	OP	OP	1	2	1
03	ACSC015A1/2X1	15	$\checkmark$	OP	OP	OP	1	2	1
04	ACSC020A1/2X1	20	$\checkmark$	OP	OP	OP	1	2	1
05	ACSC025A1/2X1	25	$\checkmark$	OP	OP	OP	1	2	1
06	ACSC030A-/2X1	30	$\checkmark$	OP	OP	OP	х	2	1
07	ACSC040A-/2X1	40	$\checkmark$	OP	OP	OP	х	2	1
08	ACSC050A-/2X1	50	$\checkmark$	OP	OP	OP	Х	2	1
09	ACSC060A-/2X2	60	$\checkmark$	OP	OP	OP	Х	2	2
10	ACSC080A-/2X2	80	$\checkmark$	OP	OP	OP	Х	2	2
11	ACSC100A-/2X2	100	$\checkmark$	OP	OP	OP	Х	2	2

AC – AIR COOLED, WC – WATER COOLED, SC – SCROLL, SW – SCREW, RP – RECIPROCATING OP - OPTIONAL,  $\sqrt{}$  - IDEAL, X – NOT APPLICABLE , EVAPORATOR – SHELL & TUBE TYPE, CONDENSOR – AIR COOLED / WATER COOLED (SHELL & TUBE TYPE )

#### Table – 2 (Scroll Chiller – Water Cooled)

				Refrig	gerant		No. of	Comp Do		Condenser
Sr.		*Capacity	Α	В	С	D		Comp. Pe	r Ref. Circuit	Water Flow rate
No.	Model No.	(In Tr.)	R22	R404	R407	R134a	Com	o. Qty	Ref. Cct.	(LPM)
01	WCSC005A1/-X1	5	$\checkmark$	OP	OP	OP	1	Х	1	140
02	WCSC010A1/2X1	10	$\checkmark$	OP	OP	OP	1	2	1	280
03	WCSC015A1/2X1	15	$\checkmark$	OP	OP	OP	1	2	1	420
04	WCSC020A1/2X1	20	$\checkmark$	OP	OP	OP	1	2	1	560
05	WCSC025A1/2X1	25	$\checkmark$	OP	OP	OP	1	2	1	700
06	WCSC030A-/2X1	30	$\checkmark$	OP	OP	OP	Х	2	1	840
07	WCSC040A-/2X1	40	$\checkmark$	OP	OP	OP	Х	2	1	1120
08	WCSC050A-/2X1	50	$\checkmark$	OP	OP	OP	Х	2	1	1400
09	WCSC060A-/2X2	60	$\checkmark$	OP	OP	OP	Х	2	2	1680
10	WCSC070A-/2X2	70	$\checkmark$	OP	OP	OP	Х	2	2	2000
11	WCSC080A-/2X2	80	$\checkmark$	OP	OP	OP	x 2		2	2240
12	WCSC100A-/2X2	100	$\checkmark$	OP	OP	OP	х	2	2	2800

## Table – 3 (Screw Chiller – Air Cooled)

		*Consoitu		Refrig	jerant		No	of Comp	Per Ref. Circuit
Sr.	Medel No	*Capacity (In Tr.)	Α	В	С	D		or comp.	
No.	No. Model No.		R22	R404	R407	R134a	Comp.Qty.		Ref. Cct.
01	ACSW040A1/-X1	040	$\checkmark$	OP	OP	OP	1	х	1
02	ACSW050A1/-X1	050	$\checkmark$	OP	OP	OP	1	х	1
03	ACSW060A1/-X1	060	$\checkmark$	OP	OP	OP	1 x		1



## Table – 4 (Screw Chiller – Water Cooled)

	Model No.	*Capacity (In Tr.)	Refrigerant				No. of Comp. Per Ref. Circuit			Condenser
Sr.			Α	В	С	D	No. of Comp. Fer Nel. Circuit			Water Flow rate
No.			R22	R404	R407	R134a	Comp. Qty F		Ref. Cct.	(LPM)
01	WCSW060A1/-X1	060	$\checkmark$	OP	OP	OP	1	Х	1	1680
02	WCSW075A1/-X1	075	$\checkmark$	OP	OP	OP	1	Х	1	2110
03	WCSW085A1/2X1	085	$\checkmark$	OP	OP	OP	1	2	1	2400
04	WCSW100A1/2X1	100	$\checkmark$	OP	OP	OP	1	2	1	2820
05	WCSW120A1/2X1	120	$\checkmark$	OP	OP	OP	1	2	1	3400
06	WCSW130A1/2X1	130	$\checkmark$	OP	OP	OP	1	2	1	3660
07	WCSW150A1/2X1	150	$\checkmark$	OP	OP	OP	1	2	1	4220
08	WCSW180A1/2X1	180	$\checkmark$	OP	OP	OP	1	2	1	5070
09	WCSW200A1/2X1	200	$\checkmark$	OP	OP	OP	1	2	1	5650

**Note1 :** \*Capacity rated on the base of water inlet temp. 15°C & water outlet temperature 10°C, Condensing temp. For water cooled system is 40°C & Air cooled system is 50°C

**Note2 :** For Water Cooled chiller, Condenser water inlet temperature 30°C.

**Note3 :** Chiller water/glycol outlet temperature ranging from -5°C to +12°C, For other temperature, higher ambient, other capacity please refer to our sales team.

#### Table – 5 (Glycol Chiller - Air Cooled)

	Model No.	*Capacity		Refriq	gerant		No. of Comp. Per Ref. Circuit		
Sr.			Α	В	С	D	NO.	or Comp.	Per Ref. Circuit
No.	Model No.	(In Tr.)	R22	R404	R407	R134a	Comp. Qty		Ref. Cct.
01	ACRP005B1/-X1	005	OP	$\checkmark$	OP	OP	1	Х	1
02	ACRP010B1/-X1	010	OP	$\checkmark$	OP	OP	1	2	1
03	ACRP015B1/-X1	015	OP	$\checkmark$	OP	OP	1	х	1
04	ACRP020B1/-X1	020	OP	$\checkmark$	OP	OP	1	2	1
05	ACRP030B1/-X1	030	OP	$\checkmark$	OP	OP	1	2	1
06	ACRP040B-/2X1	040	OP	$\checkmark$	OP	OP	х	2	1
07	ACRP060B-/2X1	060	OP	$\checkmark$	OP	OP	х	2	1

#### Table – 6 (Glycol Chiller – Water Cooled)

			Refrigerant				No. of Comp. Doy Dof. Circuit			Condenser
Sr.	Model No.	*Capacity (In Tr.)	Α	В	С	D	No. of Comp. Per Ref. Circuit			Water Flow rate
No.			R22	R404	R407	R134a	Comp. Qty Ref		Ref. Cct.	(LPM)
01	WCRP005B1/-X1	005	OP	$\checkmark$	OP	OP	1	Х	1	225
02	WCRP011B1/2X1	010	OP	$\checkmark$	OP	OP	1	2	1	450
03	WCRP017B1/-X1	015	OP	$\checkmark$	OP	OP	1	Х	1	650
04	WCRP034B1/2X1	020	OP	$\checkmark$	OP	OP	1	2	1	875
05	WCRP044B-/2X1	025	OP	$\checkmark$	OP	OP	1	Х	1	1015
06	WCRP068B-/2X1	030	OP	$\checkmark$	OP	OP	1	2	1	1400
07	WCRP068B-/2X1	040	OP	$\checkmark$	OP	OP	Х	2	1	1750
08	WCRP068B-/2X1	050	OP	$\checkmark$	OP	OP	х	2	1	2030
09	WCRP068B-/2X1	060	OP	$\checkmark$	OP	OP	х	2	1	2800

AC – AIR COOLED, WC – WATER COOLED, SC – SCROLL, SW – SCREW, RP – RECIPROCATING, OP - OPTIONAL, √ - IDEAL X – NOT APPLICABLE , EVAPORATOR – SHELL & TUBE TYPE, CONDENSOR – AIR COOLED / SHELL & TUBE TYPE

Note 1 : \*Capacity rated on the base of brine inlet temp. +5°C & outlet brine temp. 0°C, Condensing Temp. For water cooled system is 40°C & air cooled system is 50°C.

Note 2 : For Water Cooled chiller, Condenser water inlet temperature 30°C.

Note 3 : Chiller water/glycol outlet temperature ranging from -25°C to -5°C, For other temperature, higher ambient, other capacity please refer to our sales team.

## Table – 7 (Mineral Water Chiller - Air Cooled (Online & Offline)

	Model No.	*Capacity (In Tr.)		Refrig	gerant		No. of Comp. Per Ref. Circuit		
Sr.			Α	В	С	D			
No.			R22	R404	R407	R134a	Comp.Qty. Ref. Cct.		Ref. Cct.
01	ACSW002A1/-X1	2	$\checkmark$	х	х	х	1	Х	1
02	ACSW003A1/-X1	3	$\checkmark$	х	х	х	1	Х	1
03	ACSW005A1/-X1	5	$\checkmark$	OP	OP	OP	1	х	1

## **CHILLING PLANT**



#### **Controller Options**

1) Microprocessor Based

2) PLC Based (Applicable for Screw Chiller)

COMPRESSOR 2 ON

MED. LIQUID LEVEL

#### (1) Microprocessor Based Controller :

The LCD screen shows description of the controller parameters, and any other information concerning the controlled variables. Display Size : **2 Rows X 16 Characters** 

Liquid Crystal Display (LCD) Character Size : 5.65 X 2.96 mm

Controller has following Analog Inputs (Probe)	Controller has following Digital Outputs (Relay)	<ul><li>System Safety features (Trip Signals)</li><li>High Pressure</li></ul>
COND IN – Indicates Condenser Inlet temperature	Chiller Pump ON/OFF	<ul><li>Low Pressure</li><li>High Voltage</li></ul>
COND OUT – Indicates Condenser Outlet temperature	Compressor1 ON/OFF	<ul><li>Low Voltage</li><li>Phase Failure</li></ul>
WATER IN – Senses Water (Chiller) Inlet temperature	Condenser Fan1 ON/OFF	<ul><li>Chiller Pump Overload</li><li>Compressor Overload</li></ul>
WATER OUT – Senses Water (Chiller) Outlet temperature	Liquid SV1 for Pump Down1	<ul><li>Condenser Fan Overload or</li><li>Condenser Pump Overload</li></ul>
ANTI FREEZE – Used as an Internal Anti Freeze Control	Compressor2 ON/OFF	<ul><li>Low Water Flow in Chiller</li><li>Low Water Flow in Condenser</li></ul>
-	Liquid SV2 for Pump Down2	<ul><li>Single Phase Prevent</li><li>Antifreeze Trip</li></ul>
-	Alarm	Phase Input

Note : Controller informs the user of a fault condition via a Buzzer and an Alarm Relay or by Massage on display

#### (2) PLC Based Controller :

Its programmable logic controller that is fully compatible (hardware and software), which includes programmable controllers, user terminals, gateways, communication devices and remote management devices

#### Controller has following Analog & Digital inputs:

Suction Pressure, Discharge Pressure, Chiller Inlet, Chiller Outlet, Condenser Inlet, Condenser Outlet, Anti-Freeze, Emergency Stop, Compressor OLR, HP Switch & LP Switch, Evaporator Flow, Condenser Flow, Condenser Pump Overload, Chiller Pump Overload.



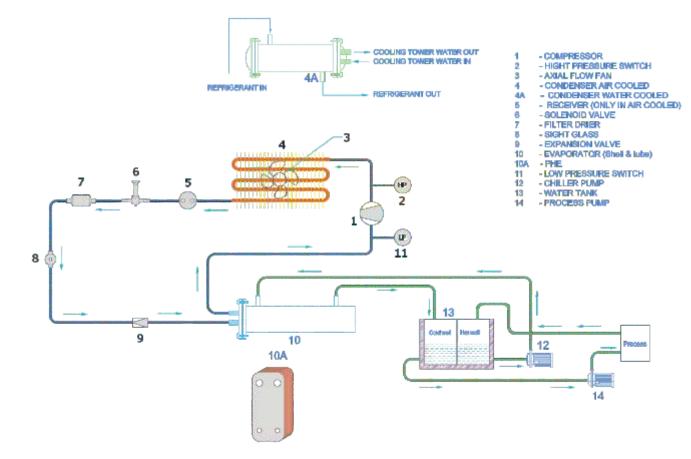


#### Self Identification Functions:-

- 1. All digital inputs & outputs such as Chiller Inlet, Chiller Outlet, Condenser Inlet, Condenser Outlet, current, Voltage, Low water flows in condenser etc.
- 2. Trouble shooting identification function: Show history of trips with date & time as well as cause of trips. **Note :** Other Customize inputs & outputs in controller, please refer to Ice Make sales team.



# **Refrigeration Cycle**



### **Key Features :**

- Availability of Customized Solution
- Eco Friendly Refrigerant
- Wide Range of Water/Glycol Temp. (+15 °C to -25 °C)
- Closed Circuit operation

- Modular Design
- Easy operation & less Maintenance
- Compact in size

## We are Dealing with Following Compressor

Scroll Compressor ,
 Make : Emerson/Copeland & Danfoss or Equivalent
 Reciprocating Compressor Type : Semi Hermetic & Hermetic sealed
 Make : Emerson/Copeland, Danfoss, Frascold & Bitzer or Equivalent
 Screw Compressor
 Make : Frascold & Bitzer or Equivalent

## **Dimple Plate in Tank Type Chiller**

Evaporator	:	Dimple Plate Type (S.S plate)
Condenser	:	Air Cooled/Water Cooled
Water Temperature Range	:	+2 °C to +4 °C
Application	:	Food & Bakery Industry
Tank M.O.C	:	Inner S.S 304 & Outer G.I.P.P./S.S 304
Insulation	:	PUF



Dimple Plate Type Evaporator

# **CHILLING PLANT**





Air Cooled V Condenser Screw Chiller



**Air Cooled Screw Chiller** 



Air Cooled Scroll Chiller



Air Cooled Scroll Chiller



**Air Cooled Glycol Chiller** 



**Online Chilling Plant** 



Water Cooled Screw Chiller



Water Cooled Scroll Chiller



Water Cooled Glycol Chiller



Water Cooled Screw Chiller



**Modular Scroll Chiller** 



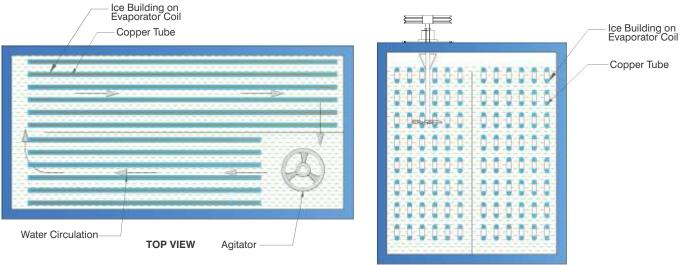
**Industrial Chilling Plant** 



IBT is a system, which store energy in the form of ICE. It is applicable in Dairy Industry for quick process in short time with certain limit of power load.

# NO NEED OF CIVIL & FABRICATION WORK AT CUSTOMER SITE EASY TO LIFT & SHIFT | 40% ENERGY EFFICIENT | BETTER INSULATION





SIDE VIEW

#### Advantage:

- Required Less connected power load
- The ice water intensively cools the product without any risk
- Power supply is not required ones Ice Formation is Completed
- No requirement of Cooling Tower and Water Supply (For Air Cooled type)
- Wide capacity with Storage tank upto 1,00,000 LTR / 33,000 KG ice formation per day
- Cooling energy storage capacity upto 900 TR. / day
- Toll Free No.: 1800 102 4615 🐵 info@bharatref.in 🞯 www.bharatref.in

# **ICE BUILDING TANK (IBT)**



#### **Material of Construction:**

#### Outer:

**A** : Pre Coated GI sheet with PVC film thickness 0.5mm **B** : stainless steel sheet, grade 304, thickness 0.5mm.

#### Inner:

**A** : M.S. Sheet Thickness 2.4 to 6 mm with epoxy paints. **B** : S.S sheet, grade 304, Thickness 0.8 to 1.6mm.

#### **Buckets:**

M.S. angle & channel 65x5 mm to 100x8 mm with Paint.

#### **PUF Insulation:**

The tank has 80mm insulation, which help to stop energy loss & Lower Power Consumption.

#### **Protection & Control accessories:**

Large graphic LCD screen Finger-touch menu with simple controls Continuous, accurate display of each action

SR NO.	MODEL	TANK CAPACITY LTR.	REFRIGERATION Unit Capacity Tr (Ton Refrigeration)	UNIT CAPACITY (TR) NO. OF UNITS	STIRRER SYSTEM TYPE	ICE PRODUCE Capacity IN KG (After 20 Hr. Working)	COOLING STORAGE Capacity in tr. (ton refrigeration) (at 2° c)	BODY SIZE (INCHES)	Connected Power Load(kw)
		LTR	TOTAL	Tr.	TYPE	KG	Tr.	TOTAL (LxWxH)	Kw
1	IBT-501.5	500	1.5	1.5 X 1	Pump	412.5	12	45 x 35 x 39	2.4
2	IBT-1002	1000	2	2 X 1	Pump	550	17	65 x 35 x 39	2.78
3	IBT-1003	1000	3	3 X 1	Agitator	825	24	65 x 35 x 39	3.8
4	IBT-2003	2000	3	3 X 1	Agitator	825	26	93 x 45 x 39	3.8
5	IBT-3003	3000	3	3 X 1	Agitator	825	28	83 x 59 x 69	3.8
6	IBT-2004	2000	4	2 X 2	Agitator	1100	34	93 x 45 x 39	5.8
7	IBT-3004	3000	4	2 X 2	Agitator	1100	35	83 x 59 x 69	5.8
8	IBT-3005	3000	5	5 X 1	Agitator	1375	43	83 x 59 x 69	6.2
9	IBT-4005	4000	5	5 X 1	Agitator	1375	44	91 x 71 x 69	6.2
10	IBT-4006	4000	6	3 X 2	Agitator	1650	52	91 x 71 x 69	7.8
11	IBT-6006	6000	6	3 X 2	Agitator	1650	55	130 x 71 x 69	7.8
12	IBT-6010	6000	10	5 X 2	Agitator	2750	85	130 x 71 x 69	12.2
13	IBT-8010	8000	10	5 X 2	Agitator	2750	89	170 x 71 x 69	12.2
14	IBT-10010	10000	10	5 X 2	Agitator	2750	92	205 x 71 x 70	12.2
15	IBT-10015	10000	15	5 X 3	Agitator	4125	130	205 x 71 x 70	18.6
16	IBT-12015	12000	15	5 X 3	Agitator	4125	133	248 x 71 x 70	18.6
17	IBT-15020	15000	20	5 X 4	Agitator	5500	176	264 x 81 x 70	24.8
18	IBT-18020	18000	20	5 X 4	Agitator	5500	181	264 x 79 x 83	24.8
19	IBT-20026	20000	26	12.8 X 2	Agitator	7150	229	264 x 84 x 86	27.2
20	IBT-25038	25000	38	12.8 X 3	Agitator	10450	328	264 x 86 x 103	41
21	IBT-28038	28000	38	12.8 X 4	Agitator	10450	333	264 x 95 x 103	41

# **ICE CANDY PRODUCTION MACHINE**



We offer a wide range of Ice Candy Production Machine developed by high quality material & advance technology which is used to produce Ice Candy.





## **Process Diagram**

Conventional Type
Ţ

# **Specifications**

Brine Storage Capacity (Approx)

Model	ICO	CP-4	ICCP-	6	ICCP-9	ICCP-15
Capacity / Hr	192 (	Candy	288 Candy		432 Candy	720 Candy
Outer Size (LxWxH)	53"x2	5"x25"	66"x32"x2	26.5"	77"x32"x26.5"	114"x32"x26.5"
Inner Tank Size (LxWxH)	47"x1	9"x22"	60"x26"x2	3.5"	71"x26"x23.5"	108"x26"x23.5"
Functional Area in Inch(LxWxH)	32"x <sup>-</sup>	19"x8"	48"x26"x	<b>‹</b> 8"	55"x26"x8"	90"x26"x8"
Power Consump. (Kw)	3	8.0	4.1		5.4	8.6
Brine Storage Capacity (Approx)	340	) Ltrs	650 Ltr	S	700 Ltrs	1080 Ltrs
Model		IC	CP-20		ICCP-32	ICCP-40
Capacity / Hr		960	Candy	1	536 Candy	1920 Candy
Outer Size in Inch (LxWxH)		114"x	38"x26.5"	168	8"x38"x26.5"	202"x38"x26.5"
Inner Tank Size in Inch (LxWxH)		108"x32"x23.5"		162"x32"x23.5"		196"x32"x23.5"
Using Area in Inch (LxWxH)		90"x32"x8"		144"x32"x8"		180"x32"x8"
Power Consump. (Kw)			10.6		16.9	20.2

# SOLID WASTE FREE CLEAN BRINE DUE TO BRINE FILTER BELTLESS AGITATOR WELL DESIGN FOR BRINE CIRCULATION TO MAINTAIN UNIFORM TEMPERATURE

Application Temp	: Ice Candy, Roll Cut Ice cream Production : -26°C to -30°C
Body	: Outer - S.S. Grade 304 Thick 1mm, Inner - S.S. Grade 316 Thick 1.2mm
Pull Down Tim	e : Ice cream base freezing time 20 to 30 minute approx. (Mix Inlet temp - $-4^{\circ}C$ to $-6^{\circ}C$ ) Water base flavor freezing time 30 to 35 minute approx. (Mix Inlet temp - $+10^{\circ}C$ to $+14^{\circ}C$ )
Conditions	: Water flow rate as per required capacity in case of water cooled system.
	Toll Free No.: 1800 102 4615 🐵 info@bharatref.in 🙆 www.bharatref.in

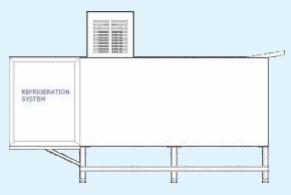
1330 Ltrs

1990 Ltrs

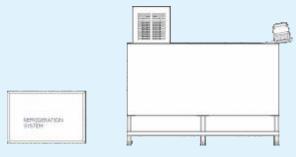
2400 Ltrs



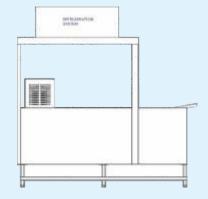
### Refrigeration system to be installed as per requirement.



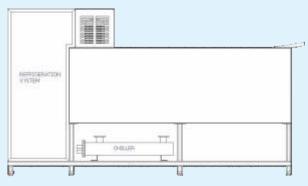
**Option A : Left / Right Side** 



**Option C : Split Side** 



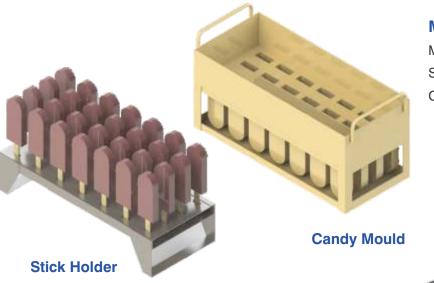
**Option B : Top Side** 



**Option D : Water Cooled Type** 

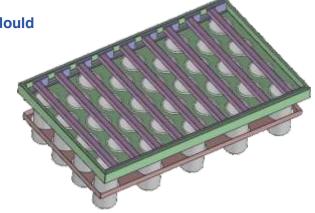
#### Mould Design We Consider

Mould Size : 17.5" x 7.25" x 9" (L x W x H) Stick Holder : 16" x 6.75" x 8.5" Contains : 24 Cavity/Mould



#### Tray For Roll Cut Type Candy Mould

S.S Tray is also to be provided for Roll cut type candy mould for those who making Roll Cut Type Candy. It makes operating & working easy while it is produced as Mould is hold by S.S Pipe & angle of Tray.





# Defrosting Cum Choco Coating Tank



	DEFROSTING CUM CHOCO COATING TANK
Body	Outer S.S Grade 304, Inner – S.S Grade 304
Size (L x W x H)	• Single : 27" x 14" x 34.5" • Double : 27" x 23.25" x 34.5"
Temperature	+30°C to +50°C
Insulation	38 mm PUF Insulation
Mounted	Mounted with S.S Stand - Grade 304
Application	<ul> <li>For uniform Demoulding of Candy from Mould</li> </ul>
	Making Uniform Layer of Choco on each Candy Of Mould
Heater	1.5 Kw
Capacity	1 Mould and 2 Mould

### **Special Features :**

- Life of Heater is long lasting as it is not in touch with Brine.
- IDM-I stands for Single Mould and IDM-II stand for Double Mould

# **ICE CREAM HARDENER**



## Hardener Deep Freezer Static Type





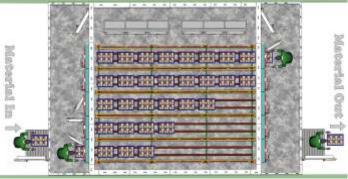
Sr. No.	Model	Ltr / Batch	Storage Cap. Ltr.	Size (Inch)	Nali / 20 Ltr.	Power Cons. / Hr	Power Supply
01	IH - 200	200	570	72 x 30 x 37	10	1.25	1 ph
02	IH - 300	320	820	96 x 30 x 37	16	1.5	1 ph

Application	: Icecream / Ice Candy, Frozen Food Hardening
Temp	: $-22^{\circ}C$ to $-26^{\circ}C$
Body	: Outer - Inner precoated G.I.
	Top & Door S.S. 410 magnetic, Inner Bottom S.S. 304

Pull Down Time: 6 to 8 Hrs approx.

#### **Blast Freezer**





**Application :** Multi Door Design is effective when freezing or hardening of Product is done with storage in crates and trolley.

- Product : Icecream, Meat, Chicken, Ready to Cook, Ready to eat
- **Temp** :  $-25^{\circ}$ C to  $-38^{\circ}$ C
- Capacity : 200 Kg to 2000 Kg
- Toll Free No.: 1800 102 4615 🐵 info@bharatref.in 🙆 www.bharatref.in 🛽



## Hardener Forced Draft Type / Tunnel Type



H-10

H-20

H-30

Model	H – 10	H – 20	H – 30	H – 39	H – 45				
Body size in inch ( W x H x D)	58.5 x 35.5 x 88	58.5 x 41.25 x 88	58.5 x 58.5 x 88	58.5 x 58.5 x 112	58.5 x 58.5 x 128				
Functional Area in inch ( W x H x D)	23 x 15 x 80 1 Nos.	23 x 15 x 80 2 Nos.	23 x 15 x 80 3 Nos.	23 x 15 x 104 3 Nos.	23 x 15 x 120 3 Nos.				
No. of Window Both Side	1	2	3	3	3				
*Stand Height	30"	25″	10"	10"	10"				
Moulds Capacity	10	20	30	39	45				
Storage Volume (Ltrs)	450 Ltr	900 Ltr	1350 Ltr	1770 Ltr	2100 Ltr				
		Standar	rd Model						
Power Input(kw)	4.1	5.4	6.9	8.6	8.6				
**Cooling Cap.	0.52 TR	0.7 TR	1 TR	1.52 TR	1.52 TR				
	Two Stage Model/Cascade Type Ref. System								
Power Input(kw)	5.4	8.8	10.8	13.6	13.6				
<b>**</b> Cooling Cap.	0.75 TR	1 TR	1.30 TR	2 TR	2 TR				

Application : Icecream / Ice Candy & Frozen Food Hardening

- Temp :  $\underline{Option A}$  : Heavy Duty $-26^{\circ}C$  to  $-30^{\circ}C$  $\underline{Option B}$  : Cascade Type $-26^{\circ}C$  to  $-40^{\circ}C$
- Body : <u>Option A</u> : Outer & Top Door GIPP, Inner S.S. Grade 304, Inner Structure S.S. Grade 202 Pipe & Angle <u>Option B</u> : Fully S.S. Grade 304, Inner Structure S.S. Grade 202
- Hardening Time : Ice Candy-15 minutes Ice cream Cup & Cone-45 minutes • 1/2 Ltr Family Pack-1.3 hrs • 1 Ltr-2.0 hrs • 4 Ltr Bulk-4 hrs • 20 Ltr Nali-6 hrs
- \* Total height = Body height + Cond. Unit Height + Stand height
- \*\* Cooling capacity based on Standard Model-Eva. Temp. -32°C and Cond.Temp. 50°C, Two Stage Model – Eva. Temp- -37°C and Cond. Temp- 25°C

# **BULK MILK CHILLER**



BHARAT

We also offering Bulk Milk Chiller Capacity from 250 Ltr to 5000 Ltr. which is used to cool milk at 4°C and to maintain freshness of milk



MTD-1500

MTD-3000/5000



#### Cooling & Maintaining Milk Quality At 4° C

The most important part of a collecting centre of milk is the bulk milk cooler (BMC). When the milk is extracted, it is at around 37°C. If the milk continues to remain at room temperature after extraction, bacterial growth will affect the quality of the milk. The BMC is meant to cool the milk to 4°C in a prescribed time. The BMC is available in different shapes and sizes which depending on the amount of milk to be cooled and the system of cooling.

Refrigeration Unit: Split type for MTD 3000/5000

#### Solutions Of Bacteria Free Milk Storage For Dairy / Milk Collection Center

#### **Special Features**

- Faster cooling owing to direct expansion
- Durable tank made of AISI 304 SS
- Digital temp controller
- Energy conscious

- Robust design.
- · Hermetically sealed compressor
- Occupy minimum space
- Designed to be user friendly

## **BULK MILK CHILLER**



### **Evaporator Cooling Tank For Faster Cooling**



In the direct expansion (DX) type, the refrigerant system directly extracts the heat via evaporator **(Dimple Jacket)** which is the part of the bottom sides of the cooling tank. The tank is insulated to maintain the temperature and is provided with an agitator for uniform distribution and cooling of milk. Efficient evaporator ensures quick and trouble- free cooling and space-saving installation. A high cooling capacity is guaranteed and freezing is prevented for small amounts of milk. The tank is made of stainless steel completely welded and polished. A smooth slope is also provided in milk tank for drain outlet such a way that total milk will drain perfectly.

#### INSULATION

Thickness 75mm. PUF Insulation CFC free. Density 38 Kg /M3. +/-2 kg, all Body PUF pouring by auto Imported Machine.

#### **STURER**

Gear motor with auto control by timer I.E.:- work 1 minute after every 15 minutes

#### FACILITY TO MEASURE MILK VOLUME

Dip stick with dip stick chart is provided to measure quantity of milk in the tank.

#### **REFRIGERATION UNIT**

- Designed to work up to 45'c in Indian weather condition
- Minimum sound & easy to maintenance
- Refrigeration system designed such a way that only 3"0 temperature will increase in 12 hours after switch off the working unit at 2'0.

Description	Unit	MTD-250	MTD-500	MTD-1000	MTD-1500	MTD-2000	MTD-3000	MTD-5000
Tank Capacity	Ltr.	250	500	1000	1500	2000	3000	5000
Dimension - Length	Inch	35	51	97	98	98	110	110
Width	Inch	28	35	35	43	43	63 (OD)	71 (OD)
Height	Inch	63	63	62	70	80	71	79
No. Of Door		1	1	2	2	2	1	2
No. Of Agitator		1	1	1	2	2	1	2
Body Type		Horizontal- Rectangular	Horizontal- Rectangular	Horizontal- Rectangular	Horizontal- Rectangular	Horizontal- Rectangular	'	Cylindrical –Closed
Power Input.(Kw)		1.2	2.7	4.5	5.9	6	7.8	11.8
Power Supply		1 Ph	1Ph	1/3 Ph	3 Ph	3 Ph	3 Ph	3 Ph
Pull Down Time		5 Hr	5 Hr	5 Hr				

#### **Technical Specification**

### **BLAST FREEZER & CHILLER**

Bharat Blast Freezer/Chiller are the essential system to extend the shelf-life of food. These machines are designed to meet customer's requirement to improve quality and organization of the work in hotel-restaurants, confectioneries, bakeries and ice-cream shops. These machines also helping meet food hygiene standards, preserving the quality of foods, and reducing food waste.



#### **Main Features:**

- Time Saving
- Purchasing Cost Saving
- Less Weight Loss
- Less Dehydration
- Wider Menu

### **Applications:**

- Hotel & Restaurant
- Bakery&Confectionaries
- Ice Cream

#### **Blast Freezing:**

To maintain the Quality (Colour, Taste, Fragrance and Feel) of Food only possible if freezing done quickly.

Bharat - Blast Freezing is here with the solution, during the freezing process, the water molecules turns in to the small crystals with quick down the temperature of food from 0°C to -26°C in approx. 5-6 hours, and it is sufficient time to obtain micro crystallization to keeping qualities of food. It is serve fresh without loss of liquid and flavour after defrosting.

#### Blast Chilling:

The main reason of growth in bacteria takes place while the food is at the temperature of between10°C to 70°C, and cooked food left down to cool slowly, to be serve later on, loses its Quality.

Bharat - Blast Chiller is here with the solution to lower the temperature at the core of foods that just have been cooked, down to 4°C in Approx. 90 Minutes, reducing bacterial growth and dehydration of foods. The finale output of foods will help you to serve with quality, colour, odor and extending self of life.

# **BLAST FREEZER & CHILLER**







#### **Benefits:**

- · Reduce the deterioration of products during the freezing process
- Increase the shelf life of the food product
- · Maintain food quality including flavour, texture, colour, aroma and nutrients
- · Save money making use of seasonal and bulk offers
- Save labour by enabling larger batch production
- · Reduce waste of unwanted products and preserve for later use
- Add new products to menu
- Be prepared and stored during less busy periods
- Assist in the improvement of service and kitchen organisation

#### **Specifications:**

Description	Blast F	reezer	Blast	Chiller
Model	IBF - 50/6	IBF - 100/12	IBC - 50/6	IBC - 100/12
Size (H X W X D)	66" X 38" X 40"	89" X 38" X 40"	66" X 38" X 40"	89" X 38" X 40"
Storage Capacity	50 KGS	100 KGS	50 KGS	100 KGS
Application		ant kitchen Foods, eat Food		nt kitchen Foods, eat Food
Temperature	-22°C to -26°C	-22°C to -26°C	4°C	4°C
Ref.Unit Capacity in BTU	4000 BTU*	6000 BTU*	9000 BTU**	16000 BTU**
Refrigerant	R404	R404	R22	R22
Pull Down Time	4 TO 5 Hrs (From	m 10°C to -18°C)	90 Minutes (From 70°C to 10°C)	
Material of Construction		OR -S.S 202, S.S. 304		OR -S.S 202, S.S. 304
Connected Load	1.7 UNIT	2.5 UNIT	1.70 UNIT	2.5 UNIT
No. of Pans	6 (2/1*65 MM)	12 (2/1*65 MM)	6 (2/1*65 MM)	12 (2/1*65 MM)

#### **Cooling Capacity based on Conditions**

\* Eva. Temp - -27°C & Cond. Temp - +50°C

\*\* Eva. Temp - -2°C & Cond. Temp - +50°C



Bharat Refrigerations is manufacturing of Mortuary Chamber with a complete solution to avoid smell, bacterial and other contamination to cadaverous, which is stored under cool condition to prevent decomposition.

Modular design of our Mortuary chamber is highly suitable in hospitals, railways, airports, defences etc. Ice Make Mortuary Chamber is PUF insulated with an excellent refrigeration control to prevent decomposition of dead bodies to store forlong period time.



## Features:

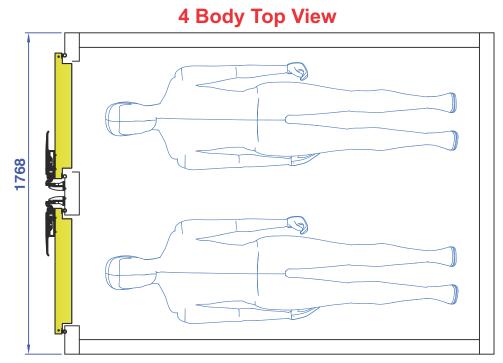
- Specially design to ensure hygiene
- Easy to clean and maintain
- Flexible to shift everywhere due to light weight
- Environmental friendly cooling system
- Tropicalized for tough weather condition
- Digital temperature indication with microprocessor based controller
- Low maintenance
- Energy Efficient
- · Corrosion resistant exterior and interior

# **Technical Specifications**

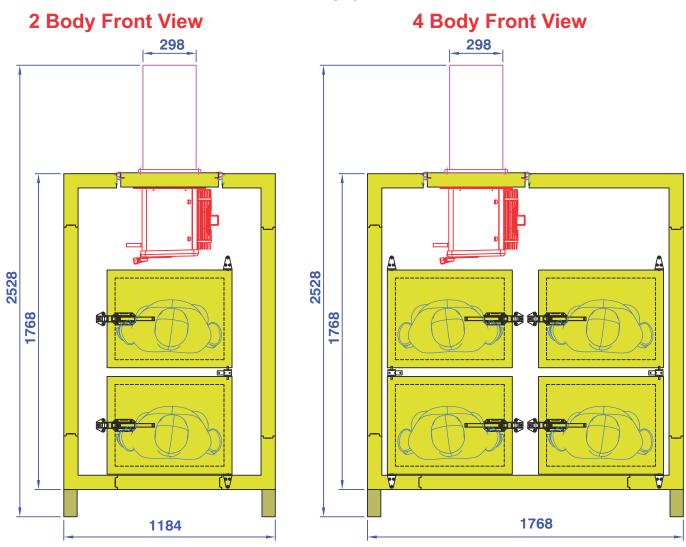
Sr. No.	Specification	Descriptions						
1.	Model	MCH-1	MCH-2	MCH-4				
2.	Storage Capacity	1 Body	2 Body	4 Body				
3.	Outer Size(LXWXH)	93" x 29" x 26"	93" x 47" x 66"	93" x 70" x 66"				
4.	Туре	Static Type	Forced Draft	Forced Draft				
5.	Material of	Outer Pre Coated G.I.Sheet, Top structure Aluminium With Glass,						
	Construction	Inner High grade S.S - 304 hot dipped MS structure with S.S Trays						
6.	Temperature	0°0						
7.	Door	Flush type & Overlap type door with heavy duty Hinges & Handles with closer along push type gasket with easy operation Size: 24" X 24", 32" X 32"						
8.	Castors	Sturdy castors						
9.	Locks	Individual Locks & Key fo	r each doors					
10.	<b>Refrigeration System</b>	Mono block type, CFC free refrigerant for low maintenance						
11.	Control Panel	Digital temperature displa	ay with microprocessor ba	ased controller				
12.	Lights	Vapour proof lights						

# **MORTUARY CHAMBER**









# **AGEING VAT**



Bharat - Ageing Vat is used to cool down ice Cream mix and to maintain temperature of around 4°C. Slow agitation allows the complete ageing of the ice cream mix.

Bharat - Ageing Vat is essential to prepare large quantities of mix for the top quality fresh ice cream. It keeps the mix well blended, prevents separation of the ingredients, to increase the thickness of mix, which in turn improves flavour, creaminess, texture, overrun and meltingresistance of ice cream.



## **Special Features**

- · Compact design
- Easy operation & User Friendly
- Automatic precision controls assure quality aging of mix
- The equipment requires a relatively small amount of floor and plant space
- The closed unit keeps the processing losses to a minimum

#### **Technical Specification**

Description	IAV-200	IAV-300	IAV-500	IAV-750	IAV-1000
Capacity (Ltrs.)	200	300	500	750	1000
Material of Ageing Vat	SS 304	SS 304	SS 304	SS 304	SS 304
Inner-Outer Shell Thickness	2 mm	2 mm	2 mm	2 mm	2 mm
PUF Insulation Thickness	75 mm	75 mm	75 mm	75 mm	75 mm
Blades Thickness	6 mm	6 mm	6 mm	6 mm	8 mm
No of Blades	2	2	2	2	2
Motor (HP)	0.5	0.5	1	1.5	1.5
Product Outlet Size	1 inch	1 inch	1.5 inch	1.5 inch	1.5 inch
Product Inlet Size	1 inch	1 inch	1.5 inch	1.5 inch	1.5 inch
Connected Load Kw	2.25	2.7	4.5	5.3	6.0

### **OUR VALUED CLIENTS**

**BHARAT** REFRIGERATIONS

- Aavin dairy product, Chennai
- Amadora Gournament Icecream Pvt Ltd, Chennai
- Ambal Gosalai, Vilathikulam
- Anbu ice creams, Rasipuram
- Arasu Ice creams, Salem
- Arrowline Organic Dairy Pvt Ltd, Chennai.
- Astra Dairy, Chennai
- Astra Weaving Pvt. Ltd, Chennai
- AVE Ice Cream, Tirunelveli
- Bell Hotels (P) Ltd, Sivakasi
- Bluesky Hose Manufacturing India Pvt Itd, Coimbatore
- Boomerang, Sri Shanti & Co, Coimbatore
- Chakravarthi Milk, Uttukkottai
- Chandran Ice Cream, Krishnagiri
- Chit Chat Food Products, Chennai
- Choice Ice Cream Milk Product, Chennai
- Classic Ice Creams, Madurai
- Country Chicken, Chennai
- Daily Dairy Foods, Chennai
- Danma Corporation, Delhi
- Dew Drops Agritech, Mysore
- Evergreen Harvest Agro Products Pvt Ltd, Chennai
- Fleet Curd Filters Pvt Ltd, Hosur
- Geevika Agro Foods, Pondichery
- Gelma Frozen Creams Pvt Ltd, Tirupathi
- Gilbargo Veedor Root India Pvt Ltd, Coimbatore
- Glacier Ice Creams, Bangalore
- GMT Ice & Cream Pvt Ltd, Kottakuppam
- Grand key Icecreams Pvt Ltd, Coimbatore
- Haritha Fehrer Limited, Sriperumbudur
- Indian Institute of Technology, Chennai
- JP Ice Creams, Chithoor
- Kalyani Fresh Vegetables, Chennai
- Kannan Milk, Komarapalyam
- Karaikal Co Operative Milk Products Union Ltd
- KRK Milk Products, Siluvampatti
- Kreem Foods (P) Ltd, Kerala
- M/s. Diary King Ice Creams, Kothakota
- M/s.Gevika Agro Foods, Chittoor
- M/s. Honeybee Amusements(P) Ltd, Bangalore
- M/s. Ram Natesh Diary Products, Coimbatore

- M/s. Snow Feast Ice Creams, Tamilnadu
- Maruthi Food Products, Vijayawada
- Meenam Ice Creames, Tiruvannamalai
- Milky way Ice Creames, Chennai
- MRF Limited, Arakkonam
- Nedkaas Cheese & Dairy Pdts Pvt Ltd, Bangalore
- New Joy Ice Cream, Tiruvanamalai
- Palani Agri Producers, Dindugal
- Paprika Oldis (I) Ltd, Virudhu Nagar
- Parker Hannifin (I) Pvt Ltd, Nagpur
- Portia Foods Enterprises, Chennai
- Prabhat Dairy Pvt Ltd, Navi Mumbai
- Radha Milk Diary, Erode
- Real Fresh Ice Creams, Ponneri
- RGN Dairy, Thiruvanamalai
- Ryco Hydralics, Malaysia
- Saint Gobain glass (I) Ltd, S.Perumbuthur
- Saladoo Healthy Foods & Beverages P Ltd., Bangalore
- Sapthagiri foods (Jai Ice cream), Chennai
- Saravana Dairy Foods, Chennai
- Saravana Stores Foods Pvt Ltd, Kancheepuram
- Schmecken Agro Food Products, Valajapet
- Shantha Biotechnics Pvt Ltd, Hyderabad
- Shurthi Milk, Chithoor
- Soni Rubber Products Ltd, Kolkatta
- Sri Balaji Venagamamba Foods Products, Andra Pradesh
- Sri Jayam Milk Dairy, Tiruvanmalai
- Sri Sai Vaccine, Andhra Pradesh
- Sundaram Ice Creams, Arakonam
- Super Hoze India Pvt Ltd, Gurumajara
- The Nilgiries Co- operative Marketing Society, Nilgirie
- The Pondicherry co-op Milk Products Union Ltd, Puducherry
- Thirupathi Frozen Foods, Andhra Pradesh
- Tniguni Food Pvt Ltd, Chennai
- V.P.Logistics Vaccine House, Chennai
- Vellore Dairy Foods, Vellore
- Vijayalakshmi Ice Creams, Chitoor
- VNS Enviro Biotech, Chennai
- West Coast Fine Foods (I) P Ltd, Chennai







# **INDUSTRIES WE SERVE**





Dairy Product Industry



Ice Cream Industry



Food Processing Industry



Agro Industry



Horticulture / Floriculture Industry



Hotel - Restaurant



Retail Outlet for Dairy - Ice Cream



Hospitality Industry



Pharmaceutical Industry



**Plastic Industry** 



**Chemical Processing Industry** 



Biological / Research



Logistic



Seed Industry



Renewable Energy industries

# NETWORK









# **Bharat Refrigerations Pvt. Ltd.**

(Wholly Subsidized of ICE MAKE REFRIGERATION PVT. LTD.) Manufacturers of Industrial Refrigeration Equipment & Reefers

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