



SOLUTION FOR COMPLETE
DAIRY PROCESSING PLANT



MILK

CURD, BUTTERMILK,

LASSI, CREAM

GHEE, BUTTER

PANEER & CHEESE

FLAVOURED

CHOCOLATE

MILK

ICECREAM

PROCESSING



Cold Room /
Storage



Industrial
Refrigeration



Commercial
Refrigeration



Transport
Refrigeration



Ammonia
Refrigeration



Dairy
Refrigeration



Bharat Refrigerations Pvt Ltd has been successful satisfying the cold chain needs of its customers, from production to after-sales services, since 1980. Bharat Refrigerations Pvt Ltd has been taken over by Ice Make Refrigeration Limited in 2016. The Company is engaged in the business of providing customized cooling solutions to diverse set of clients across wide range of industries by manufacturing and exporting high quality refrigeration products & equipment.

Bharat Refrigerations provides solution to Dairy Processing with special attention to Farmers and Entrepreneurs. Bharat provides Dairy Processing Plant solution for milk and byproducts processing with a capacity ranging from 100 LPH to 10,000 LPH.

Bharat Refrigerations' Dairy Processing Plant is designed for ease of operation. It is designed considering the importance of time and energy. Our Dairy Plant is constructed using high grade SS-304 and SS-316 steel. The plant is designed for Multi Product and Multi Temperature. The plant is designed, fabricated and executed by segment experts under proven quality standards.

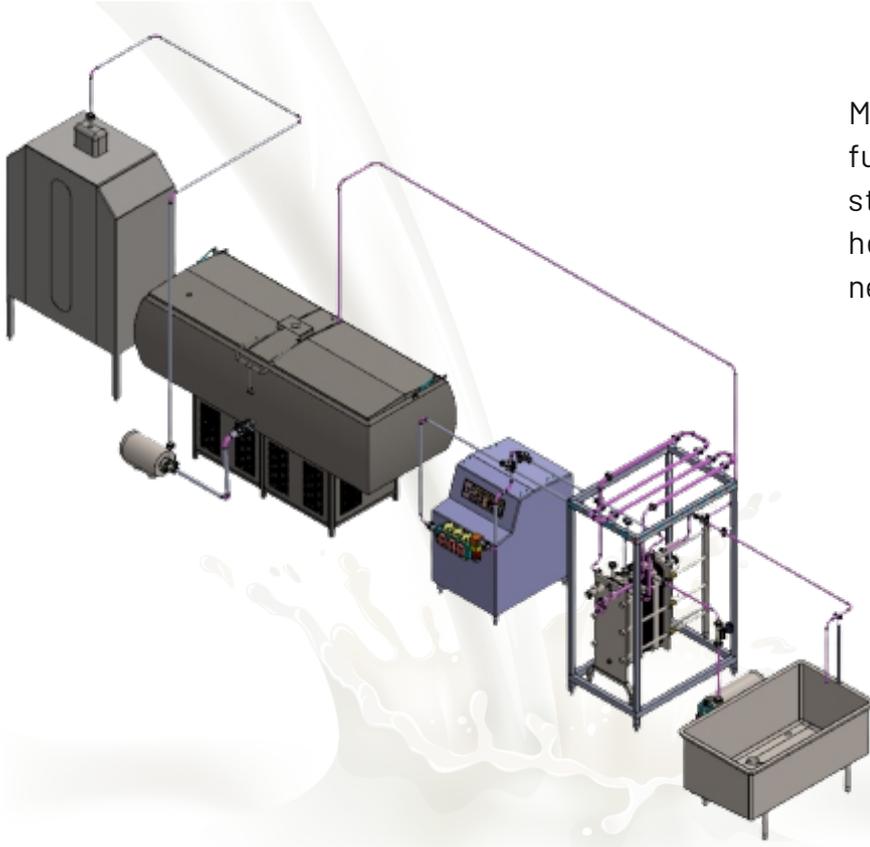
Ice Make has state-of-the-art manufacturing facilities located in Ahmedabad (Gujarat) and Chennai (Tamil Nadu). We operate under five key business verticals which include Cold Room, Commercial Refrigeration, Industrial Refrigeration, Transport Refrigeration and Amonia Refrigeration.



Plant-1



Plant-2



Milk Processing Plant offers simple and functional solutions. We produce stainless steel tanks in different specification like heating, cooling and isolation according to needs in Milk.

Application & Solution We Serve



Bharat Refrigerations' Pasteurizer is designed for the process of heating milk and then quickly cooling it down to eliminate certain bacteria. The purpose is to make the product safe for consumption and to enhance product's shelf-life. Bharat supplies the best quality equipment by using effective manufacturing technology and following good standards yet available at very competitive price.

Features:

- Highly Durable
- Good Quality Raw Material
- MOC AISI (304, 304I, 316, 316I)
- Reliable & Optimal
- Excellent Finish
- Affordable Price

MINI DAIRY PLANT (200 TO 500 LPH)



Multipurpose plant - Hot Water / Steam

Temperature Program: 4/30 - 45/55 - 70/72 - 80/90 - 4/45 °C

Daily Milk Handling Capacity: 5000 ltr/day

Product Range: Milk, Paneer, Curd

MEDIUM CAPACITY DAIRY PLANT (1000 TO 3000 LPH)



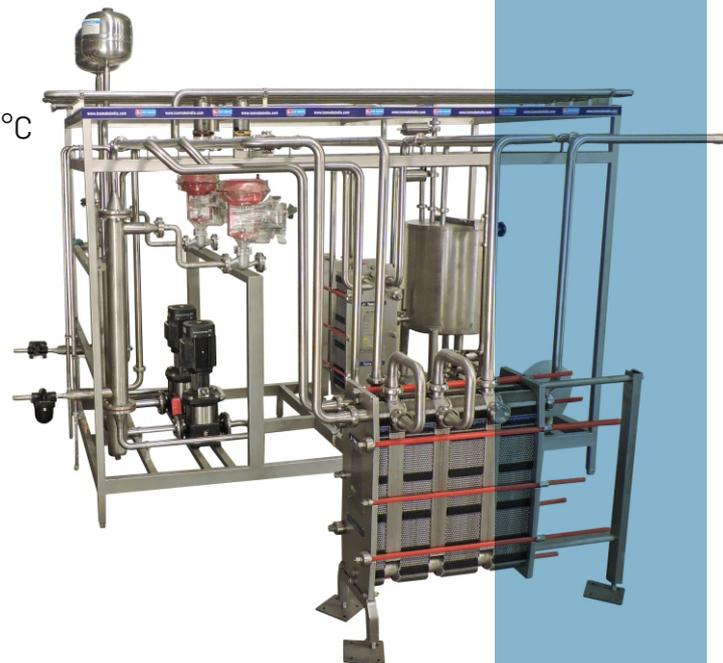
Multipurpose plant - Hot Water / Steam

Temperature Program: 4/30 - 45/55 - 70/72 - 80/90 - 4/45 °C

Daily Milk Handling Capacity: 30000ltr/day

Product Range: Milk, Paneer, Curd

HIGHER CAPACITY DAIRY PLANT (5000 to 20000 LPH)



Multipurpose plant - Hot Water / Steam

Temperature Program: 4/30 - 45/55 - 70/72 - 80/90 - 4/45 °C

Daily Milk Handling Capacity: 50000 ltr/day

Product Range: Milk, Paneer, Curd



Weighing Bowl
(500-1000Ltr)



Can Tipping Bar & Can Drip Saver



Dump Tank With Wheel (100-1000Ltr)



Can Scrubber

Mobile – Bulk Milk Chiller

Bharat Refrigerations' Mobile Bulk Milk Chiller can be an essential part of milk supply chain. Mobile Bulk Milk Chiller is a BMC on-wheels. MBMC helps you to cool down milk temperature during transportation. Milk temperature will be brought down to +4°C to maintain the freshness of milk.

This MBMC is mounted on vehicle and it can be custom built with multiple compartments, fitted with accessories like dump tank, pump, DG set, SS piping for loading-unloading of Milk & CIP process; specially designed as per customers' requirements.



Mobile – Bulk Milk Chiller

Capacity

2000 Ltr.

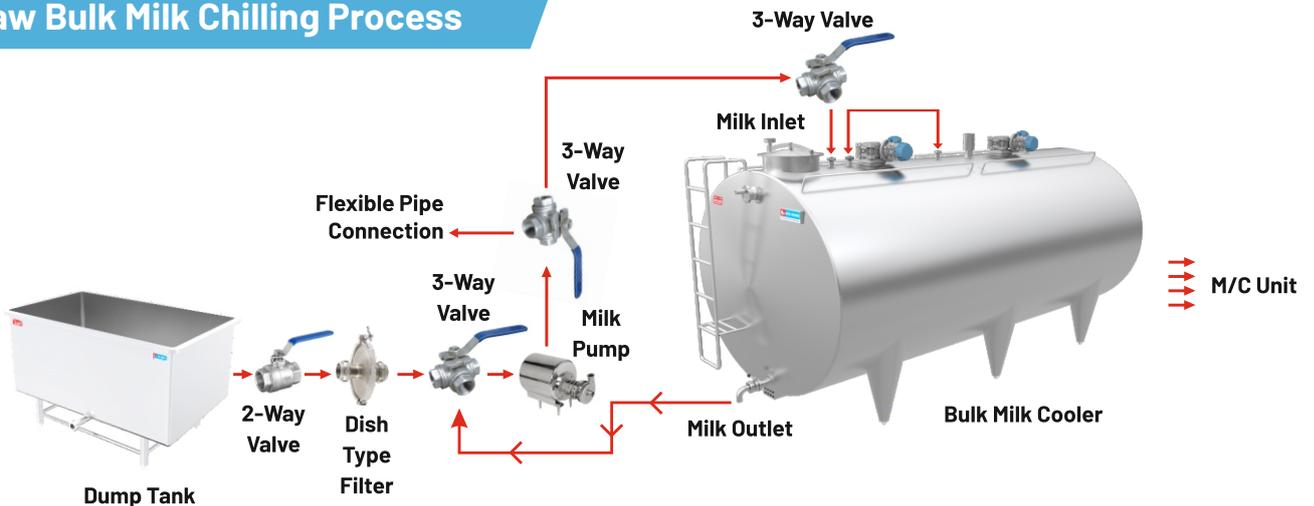


Mobile – Bulk Milk Chiller (2 Compartments)

Capacity

6000 Ltr.

Raw Bulk Milk Chilling Process



With the assistance of our professionals, we are proficient in providing HMST and VMST Milk Storage Tank. HMST and VMST are insulated tanks, used for storing chilled milk at milk chilling centers. Due to its good design and insulation, the temperature of the milk is maintained and the milk is held in it until further processing.

Due to their easy operation and longer operational life, these equipment are highly admired in dairy industry.

Features:

- Low maintenance
- Easy installation
- Longer service life
- Maintains stored milk temperature for up to 24 hours
- Sturdy construction
- Corrosion resistant
- High tensile strength

Horizontal Milk Storage Tank (HMST)



Horizontal Tanks

Capacity

10,000 Ltr.

Technical Specification for HMST (Single Comp.) Tank

Model	UOM	2 KL HMST Single Comp	3 KL HMST Single Comp	5 KL HMST Single Comp	10 KL HMST Single Comp	15 KL HMST Single Comp	20 KL HMST Single Comp
Capacity	Litre	2000	3000	5000	10000	15000	20000
Outer Diameter	mm	1458	1558	1783	2308	2308	2308
Total Height	mm	2150	2250	2350	3050	3050	3050
Total Length	mm	2550	2550	3050	3650	5150	6600
Insulation Type		PUF	PUF	PUF	PUF + Glasswool	PUF + Glasswool	PUF + Glasswool
Insulation Thickness	mm	75	75	75	90	90	90
Inner MOC		SS-304	SS-304	SS-304	SS-304	SS-304	SS-304
Inner Shell / Side Dish Thickness	mm	2.0 / 2.0	2.0 / 2.0	2.0 / 2.0	2.0 / 2.0	2.0 / 2.0	2.0 / 2.0
Outer MOC		SS-304	SS-304	SS-304	SS-304	SS-304	SS-304
Outer Shell / Side Dish Thickness		2.0 / 2.0	2.0 / 2.0	2.0 / 2.0	2.0 / 2.0	2.0 / 2.0	2.0 / 2.0
Agitator Drive / No of Agitator	HP	0.5HP / 1Nos	0.5HP / 1Nos	0.5HP / 1Nos	0.5HP / 1Nos	0.5HP / 2 Nos	1 HP / 2 Nos
Agitator Mounting		Top	Top	Top	Top	Top	Top
Manhole Type		Top	Top	Top	Top	Top	Top
Inlet Connection	mm	38	51	51	51	51	51
Outlet Connection	mm	51	51	51	51	63	63
Spray Ball	Nos.	2	2	2	2	3	3
Ladder		YES	YES	YES	YES	YES	YES
Light with Sight Glass		YES	YES	YES	YES	YES	YES
Air Vent		YES	YES	YES	YES	YES	YES
Leg	Nos.	4	4	4	6	6	8

Horizontal Tanks with double compartment (HMST)



Horizontal Tanks With Double Compartment (HMST)

Capacity

20,000 Ltr. (10 KL + 10 KL)

Technical Specification for HMST (Double Comp.) Tank

Model	UOM	3 Or 3.5 KL HMST Double Comp	5 Or 6 KL HMST Double Comp	10 KL HMST Double Comp	20 KL HMST Double Comp
Capacity	Litre	(1750+1750)	(3000+3000)	(5000+5000)	(10000+10000)
Outer Diameter	mm	1458	1808	2188	2308
Total Height	mm	2200	2550	2850	3050
Total Length	mm	3750	3950	4550	6700
Insulation Type		PUF	PUF	PUF + Glasswool	PUF + Glasswool
Insulation Thickness	mm	75	75	90	90
Inner MOC		SS-304	SS-304	SS-304	SS-304
Inner Shell / Side Dish Thickness	mm	2.0 / 2.0	2.0 / 2.0	2.0 / 2.0	2.0 / 2.0
Outer MOC		SS-304	SS-304	SS-304	SS-304
Outer Shell / Side Dish Thickness		2.0 / 2.0	2.0 / 2.0	2.0 / 2.0	2.0 / 2.0
Agitator Drive / No of Agitator	HP	0.5HP / 2 Nos	0.5HP / 2 Nos	0.5HP / 2 Nos	1 HP / 2 Nos
Agitator Mounting		Top	Top	Top	Top
Manhole Type		Top	Top	Top	Top
Inlet Connection	mm	51	51	51	51
Outlet Connection	mm	51	51	51	63
Spray Ball	Nos.	2	2	2	4
Ladder		YES	YES	YES	YES
Light with Sight Glass		YES	YES	YES	YES
Air Vent		YES	YES	YES	YES
Leg	Nos.	4	6	6	8



Vertical Tanks

Capacity

30,000 Ltr.

Vertical Milk Storage Tank (VMST)



Vertical Tanks

Capacity

10,000 Ltr.

Technical Specification for VMST Tank

Model	UOM	VMST-500	VMST-750	VMST-1000	VMST-2000	VMST-3000	VMST-5000	VMST-10000	VMST-20000-A	VMST-20000-B	VMST-30000	VMST-40000	VMST-50000
Capacity	Litre	500	750	1000	2000	3000	5000	10000	20000-A	20000-B	30000	40000	50000
Outer Diameter	mm	1058	1158	1408	1578	1758	1858	2308	2538	2308	2909	3409	3639
Total Height	mm	1900	2100	2250	2600	2900	3500	4250	5850	6900	6250	6150	6650
Insulation Type		PUF	PUF	PUF	PUF	PUF	PUF	PUF+Glass wool	PUF+Glass wool	PUF+Glass wool	PUF+Glasswool	PUF+Glasswool	PUF+Glass wool
Insulation Thickness	mm	75	75	75	75	75	75	90	90	90	90	90	90
Top Insulation		No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Inner MOC		SS-304											
Inner Shell / Bottom Dish / Top Dish Thickness	mm	2.0 / 2.0 / 2.0	2.0 / 2.0 / 2.0	2.0 / 2.5 / 0.0	2.0 / 2.5 / 0.0	2.0 / 2.5 / 0.0	2.0 / 2.5 / 0.0	2.0 / 2.5 / 2.5	2.5 / 3.0 / 2.5	2.5 / 3.0 / 2.5	2.5 / 3.0 / 2.5	2.5 / 3.0 / 2.5	2.5 / 3.0 / 2.5
Outer MOC		SS-304											
Outer Shell / Bottom Dish / Top Dish Thickness		2.0 / 2.0 / 2.0	2.0 / 2.0 / 2.0	2.0 / 2.0 / 2.5	2.0 / 2.0 / 2.5	2.0 / 2.0 / 2.5	2.0 / 2.0 / 2.5	2.0 / 2.0 / 2.0	2.0 / 2.0 / 2.0	2.0 / 2.0 / 2.0	2.0 / 2.0 / 2.0	2.0 / 2.0 / 2.0	2.0 / 2.0 / 2.0
Agitator Drive	HP	0.5	0.5	0.5	0.5	0.5	0.5	1.0	2.0	2.0	3.0	3.0	3.0
Agitator Mounting		Top	Side	Side	Side	Side	Side						
Manhole Type		Full Open	Full Open	Top	Top	Top	Top	Side	Side	Side	Side	Side	Side
Inlet Connection	mm	38	38	38	38	38	51	51	63	63	63	63	63
Outlet Connection	mm	38	51	51	51	51	51	51	63	63	63	63	63
Spray Ball	Nos.	1	1	2	2	2	2	2	1	1	1	1	1
Ladder		NA	NA	YES									
Light with Sight Glass		NA	NA	YES									
Air Vent		NA	NA	YES									
Leg	Nos.	4	4	4	4	4	4	4	Without Leg				



Cream Separator Machine



Cream Tanks
(500 to 3000 ltr.)



Steam fired khoa kettle
Gas fired khoa kettle (100 to 500 ltr.)



Ghee kettle
(500 to 1000 ltr.)



Butter Churner
(200 to 500 ltr.)



Butter Melting Vats
(300 to 1000 ltr.)



Curd Incubation With Chilling
(350 to 1000 ltr. Per batch)



Chamber Temperature while Heating : 32°C to 45°C
Chamber Temperature while Cooling : 2°C to 8°C



Curd Storage Tank
(300 to 1000 ltr.)



Pasteurization

Chilling
upto 45°C

Addition of
culture in
exact
proportion

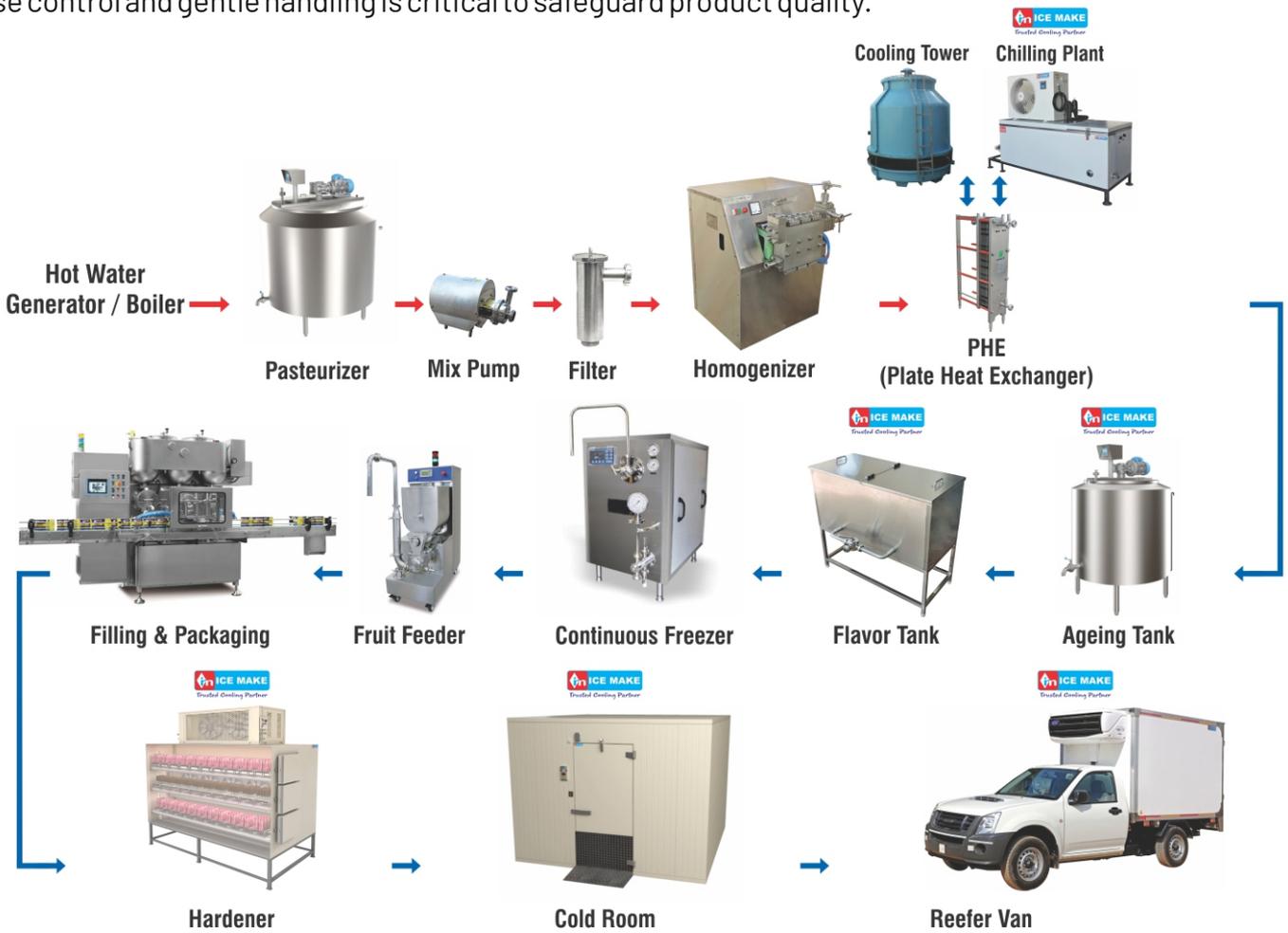
Incubation it
upto 4 to 5 hr
@42°C in
incubation
Room

Chill it upto
20°C Within
1 hour in
Blast Chiller

Storage
In Cold Room
@5°C

Ice Cream Processing Machineries

Producing ice cream mix requires knowledge of many different aspects of production, including pasteurization, homogenization, freezing and handling as well as an understanding of how these processes affect your ingredients. To ensure the highest quality ice cream without compromising integrity, uniform mixing of dry and liquid ingredients require optimal dispersion and operational efficiency. Temperatures and timing along with precise control and gentle handling is critical to safeguard product quality.



Ice Cream Mix Plant

Bharat Refrigerations offers a complete range of equipment for ice cream mix preparation, especially designed for small and medium scale ice cream industry.





Batch Pasteurizer Machine



Ventury - Mix Powder Blending Machine



Homogenizer



Tunnel Type - Hardener



Ageing Vat



Flavour Tank / Flavour Mixing Vat



Paneer Coagulation Dump Tanks



Paneer Block Cooling Tank



Paneer Hoop / Panner Pressing System

CIP System



Single Tank CIP System

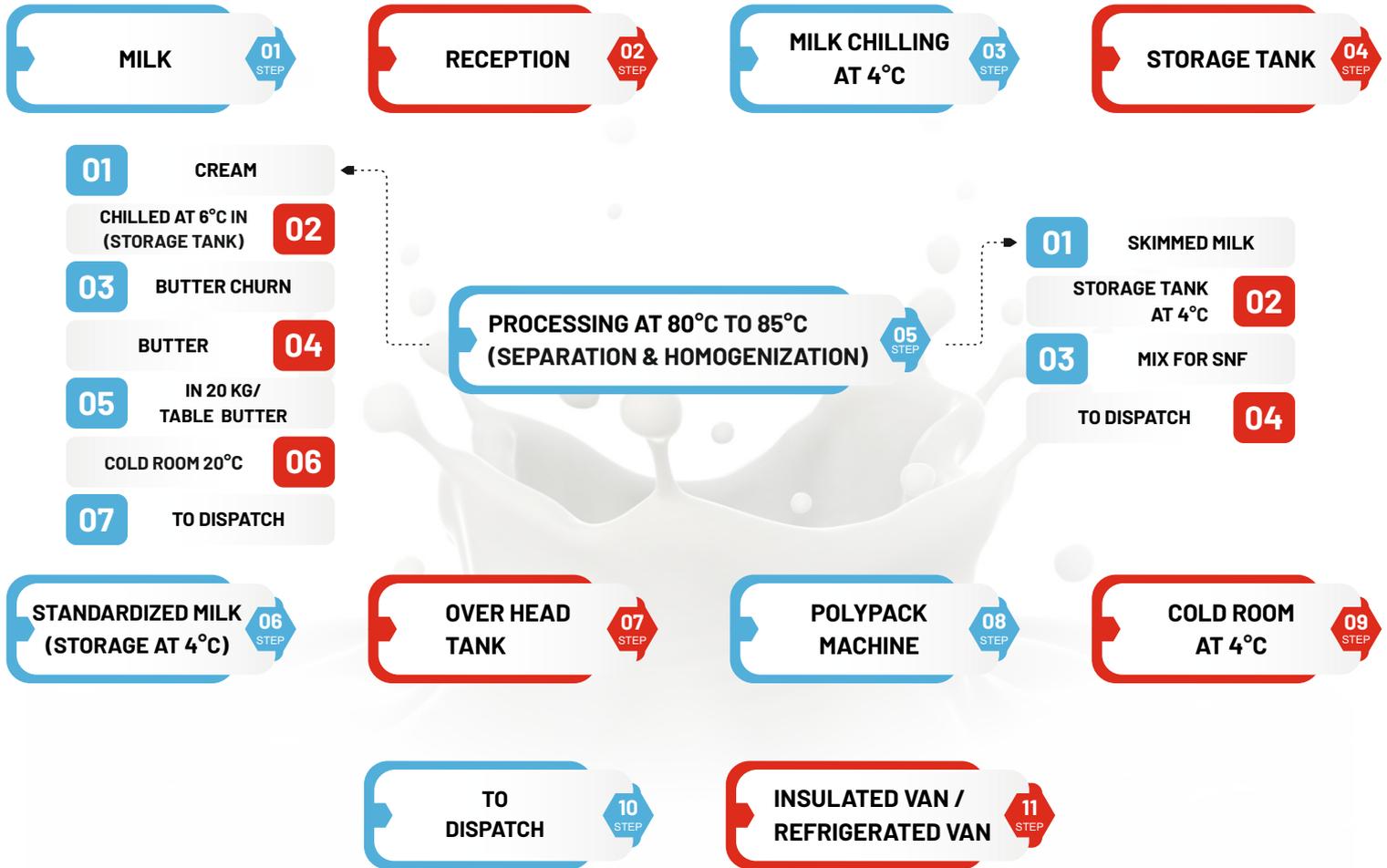


Single / Double Circuit CIP System



Automatic CIP System

Fresh Milk All The Way Through



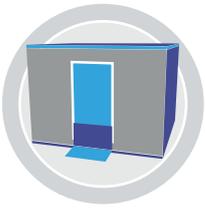
Network

We have developed a strong national presence with manufacturing plants, branch offices and dealer-associates network. Bharat Refrigerations applies its engineering and applications expertise to provide your organization with the right product solution and support every time.

Export to Other Countries



Our Business Vertical



Cold Room / Storage

- Cold Room PUF Panels (Discontinuous Type) 60, 80, 100, 125 & 150 mm
- Cold Room Door
- Solar Cold Room
- Glass Door Display Chiller
- Condensing Unit (Air/Water Cooled)
- Evaporator Unit
- Control Panel for Cold Room
- Curd Incubation Chamber
- Ripening Chamber
- Pre-Cooling Chamber
- Blast Freezer & Chiller



Ammonia Refrigeration

- Turnkey Projects for Cold Stores
- Water Chillers for Dairy
- Glycol Chillers for milk deep chilling for dairy
- Glycol chillers for beverage plants
- Glycol chillers for brewery plants
- Water Chillers for Pharma
- LP Receivers with Ammonia Pumps for retrofit plants
- Ice Accumulating Coils
- Atmospheric Condensers



Industrial Refrigeration

- Water Chilling Plant
- Brine Chilling Plant
- Oil Chilling Plant
- Air Chilling Plant
- Ice Building Tank (IBT)



Commercial Refrigeration

- Ice Cream Mix Plant
- Batch Pasteurizer
- Ageing Vat
- Bulk Milk Chiller
- Ice Candy Production Machine
- Ice Cream Hardener (Static/Tunnel Type)
- Mini Blast Freezer & Chiller
- Deep Freezer & Chest Cooler
- Vertical Cooler
- Dairy Freezer
- Under Counter Refrigeration
- Mortuary Chamber
- Heat Pump Food Dehydrator
- Freeze Dryer



Transport Refrigeration

- Refrigerated Container (GRP/GIPP)
- Refrigerated Van - Eutectic (GRP/GIPP)
- Dry Insulated Container (GRP/GIPP)
- Bunk House

Total Cold Chain Solution



Our Valued Clients



Turnkey Project Details

- **Kashvi Milk Products**
Chittoor
- **PrayagFood Products (Kashi Milk)**
Chennai
- **Astra Dairy**
Gumminipondi
- **Raaj Dairy**
Rajapalayam
- **Frostbite (Hollyberry)**
Chennai
- **Patel Dairy Products Pvt. Ltd. (Chhaswala)** Ahmedabad
- **Murlidhar Dairy Farm**
Daman
- **SomaniDudhSewa**
Dhar (MP)
- **Maruti Dairy**
Badmer (Rajasthan)
- **Modern's Milk and Agro Products (I) Pvt Ltd** Jaunpur (UP)
- **Mahalaxmi Dairy Udhyog**
Kapulvastu(Nepal)
- **Nature Farms Ghana Ltd.**
Ghana (West Africa)



BHARAT REFRIGERATIONS PVT. LTD.

(Wholly Owned Subsidiary of ICE MAKE REFRIGERATION LIMITED)

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