configurable, innovative, performance proven reliability in combination with optimized efficiency



Air conditioning & Refrigeration system



SBC Cooling Pvt. Ltd.

Complete HVAC/R Solution





Designed for your needs ?
Cooling System

Company Profile

SBC Cooling Pvt. Ltd., Manufactures Refrigeration System since 1998 with aim of satisfying at the best request of the market in the air conditioning and refrigeration systems.

Since 1998 Established under the name Shree Bhagavati Refrigeration Service as proprietorship firm. From 2012, Renamed as SB Cooling Corporation and reconstituted as a partnership firm. Thereafter in 2017 we renamed as SBC Cooling Private Limited. The range, which we offer is manufactured in compliance with the quality standards set by the industry. Owning to their sturdy construction, optimum performance and energy efficiency nature, these equipment's find their extensive applications in almost all commercial and industries.

We are leading manufacturer, supplier and exporter of a comprehensive chiller and chilling plant. Our range are used in oil & gas, food and beverages, pharmaceuticals, chemicals, plastics, textiles, diamond, anodizing and almost all the industries.

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Mission

To become a lean power train manufacturing plant focused on cost efficiency and product reliability and performance through:

- >> Surpassing customers expectations of quality and delivery.
- Innovative and sustainable processes focusing on prevention of natural resources.
- **>>** Empowered and enthused work environment promoting core values.

Vision

- ► To be a Customer oriented.
- ▶ Environment friendly.
- ▶ Benchmark Power-train manufacturing organization.





Quality Policy

We, at SBC Cooling Pvt. Ltd., are committed to maximizing customer satisfaction and continuously enhancing the level of excellence in all our areas of performance through:

- Innovative people process approaches and continuous enhancement of knowledge and skills.
- >> Implementation and continual improvement of a well defined quality management system.

We, at SBC Cooling Pvt. Ltd., would like to be acknowledged worldwide for premium quality, reliability and durability.

Client Satisfaction

Being a client conscious firm, we work hard to direct all our efforts to achieve the utmost level of customer satisfaction by providing a quality array of products. Further, to gain faith and trust of the customers, we make sure that the products are offered at competitive prices within the promised time frame. Our professionals organize stringent check on the products to ensure delivery of flawless products. Furthermore, we hold expertise in developing the products in line with the customer's specifications. It is due to our transparent business practices and convenient payment modes that we have been able to expand our client base in the Indian market.





Industrial Chiller - Water Cooled Screw Chiller

SBC manufactures completely customized & Industrial chiller systems as per the customer requirement including water cooled chiller. We supply chilling systems and chillers to a wide variety of industrial processes and production machinery applications, ranging from self-contained portable units through to completely installed "turn-key systems". Some of the more common applications are listed below in the past, fresh water was used freely for cooling production processes. Today, most processes require cooling water with much closer defined tolerances. Industrial chillers provide cooling in a controlled closed circuit. This means that the water used for your production processes is reliable, constant and defined.

The capacity of these Chillers varies exactly as per the fluctuating load conditions, to have the energy efficiency at its best. Data logging, BMS operation and controlling as well as synchronizing with the centralized systems remain standard. The costs involved in installation and maintenance are reduced to minimum by providing the necessary Chiller fittings as standard. The machines are designed giving proper thought to have them easily and quickly.

Water-cooled screw chillers are widely used in the fields of plastic, electroplating, electronics, chemical, pharmaceutical, printing, food processing and other industrial refrigeration process to use chilled water or large shopping malls, hotels, Factories, hospitals, soft drinks, soda, bulk drug manufacturing, beverages, bakery, laboratories, petrochemical and refineries and other central air conditioning projects need to use chilled water concentrated cooling areas.



Tonnage Capacity available in Water cooled Screw Chiller up to: 20 TR to 300 TR (Single Circuit)

Tonnage Capacity available in Water cooled Screw Chiller up to: 20 TR to 600 TR (Multi Circuit)

Temperature Scope : (+) 20 °C to (-) 40 °C

Designed for your needs ! Cooling System

Water Cooled Screw Chiller



Features

- Capacity and energy savings
- Custom and modular design for your specific needs
- ► Engineered with the most efficient and highest performing components and materials
- ► Simplify with a single-source of responsibility
- ▶ 100% managed from design through delivery
- ► Fully automatic for Safety of Equipment's
- ▶ Energy Efficient Chiller with PLC based Control Panel
- ASME class heat exchangers-designed to withstand pressure 3 times greater than the vessel's relief pressure
- ▶ PLC Based Control Panel
- ▶ Environment Friendly
- Lower Annual Operating Costs
- Reliable, Simple Operation and Maintenance
- ▶ Highly reliable, efficient and low noise level



Air Cooled Screw Chiller

The unit have compact structure and small size with convenient installation and maintenance. The unit Provide highly accurate outlet water temperature control to ensure the constant and comfortable temperature for process.

For higher refrigeration capacity these systems are conceived with multiple compressor arrangement. Each compressor is propped up by solitary refrigeration circuit. The solitary refrigeration circuit forge the maintenance procedure easy without muddling the process.



Tonnage Capacity in Air cooled Screw Chiller up to : $20\ TR$ to $300\ TR$

Tonnage Capacity in Water cooled Screw Chiller up to : 20 TR to 600 TR (Multi Circuit)

Temperature Scope : (+) 20 °C to (-) 25 °C





Features:

- ►► Capability to select different compressors based on efficiency, serviceability and life expectancy.
- ► Ability to select a different evaporator design based on size, freeze protection and serviceability.
- ▶▶ Ability to select different condenser coils based on efficiency, corrosion resistance and weight.
- >> Capability to select constant speed or variable speed technology for the compressor and fans based on efficiency.
- ▶▶ Ability to choose from multiple footprints for a given capacity in order to optimize efficiency while meeting space requirements.

In addition, air-cooled chiller condenser coils are available in different configurations, providing another level of customization. The two most common choices are the aluminium / copper (Al/Cu) and the micro channel heat exchanger (MCHX) coil designs, but other options are available.



Air Cooled Scroll Chiller

The Air-cooled Scroll Chillers are known for high energy efficiency. These are specially designed to work well within the extreme tropical weather conditions. The chillers are tested in compliance with the international standards of the industry. These are operation friendly and easy to install. The chillers come with numerous compressor configurations. Every compressor is backed by an individual refrigeration circuit. This separate refrigeration circuit makes its maintenance easy. The equipment contains fluid pump and storage tank on the skid. Air Cooled Scroll Chiller is Manufactured using illustrious Scroll compressor make available from Danfoss and Emerson.





Wide Range of Model For Air Cooled & Water Cooled Scroll Chiller:

Air-cooled Scroll Chillers : 3 TR to 25 TR (Single Circuit) **Water-cooled Scroll Chillers :** 3 TR to 25 TR (Single Circuit)

Temperature Scope of Air Cooled & Water Cooled Scroll Chiller : (+) $15~^{\circ}\text{C}$ to (-) $25~^{\circ}\text{C}$

Chiller TR Capacity Range for Air & Water Cooled Scroll Chiller: 3 TR to 100 TR (Multi Circuit)

Water Cooled Scroll Chiller

Water Cooled Scroll Chiller is manufactured using illustrious scroll compressor make available from Danfoss and Copeland. The design of this fully microprocessor based suitable for cooling application ranging from +15 °C to -25 °C it is engrossed with single / multiple scroll compressor along with individual refrigerant circuit. The clients have an option of using CFC free refrigerant R-134a / R-407c / R-404a and stainless steel chilled water circulation tank (If necessary).





Features:

- ▶ High cooling with low power consumption.
- >> Design for high ambient condition up to 55 °C
- ▶ Environment friendly (CFC Free) Refrigerant R-134a / R-407c / R-404a available.
- ▶ Electronic expansion valves for larger capacities, for energy efficiency and precise temperature control.
- >> Set the high and low pressure protection, chilled water anti-freeze protection, power phase sequence protection, default phase protection, low of water flow protection, compressor motor overload / overheating protection and auto restart function on power failure.
- Easy interface with BMS through protocols(optional).
- ▶ Body is made up of galvanized steel with 7 processed powder coating.
- ▶ Weather and dust proof design with IP55 / IP65 level protection available.
- Fully automatic PLC based unit with data logging facility available.
- >> Shell and tube evaporators with high flow design for batter temperature result.



Air Cooled Reciprocating Chiller

The main purpose of **Reciprocating Air Cooled Chiller** is to cool the surrounding air. Such refrigeration devices are suitable for serving the larger scale industrial needs. The Reciprocating air cooled chiller is powerful enough to work for the domestic, industrial or commercial purpose of cooling huge machines and air conditioning. While maintaining high energy efficiency, the Air-Cooled Reciprocating Chillers are suitable to work in extreme tropical weather conditions. These are designed, manufactured and tested in accordance with international standards. These equipment are easy to install and operation friendly, backed by the competent engineering team to realize the advantage while being in operation.

Air-cooled reciprocating chillers are suitable to work even the extreme tropical weather conditions, as they are manufactured with the feature of high energy efficiency. They are designed and tested according to the international standards. They are easy to install and are easy to operate.

Air Cooled Reciprocating Chiller







Wide Range Of Model For Air Cooled & Water Cooled Reciprocating Chiller

Air-cooled Reciprocating Chillers : 2 TR to 50 TR (Single Circuit) **Water-cooled Reciprocating Chillers :** 2 TR to 50 TR (Single Circuit)

Temperature Scope: (+) 15 °C to (-) 60 °C

Chiller TR Capacity Range for Air & Water Cooled Scroll Chiller: 3 TR to 100 TR (Multi Circuit)

Water Cooled Reciprocating Chiller

Designed to work in extreme tropical conditions, the Water-cooled Reciprocating Chillers are energy efficient and environmental friendly. These chillers are designed and manufactured within the best available facilities and are tested as per the most stringent international parameters. The equipment is easy to install and operation friendly.

These water cooled reciprocating chillers are used in specific industrial applications, where the fluid temperatures and other factors are of primary importance. These chillers are custom designed in accordance with special process requirements.

They are designed to give a great performance in the most extreme tropical conditions, the water-cooled chillers are energy efficient and also they are environmental friendly. They are tested within the most prominent international parameter. They are used in the specific industry for application where the fluid temperatures and other such factors are important. They can be customized according to the requirements.

Reciprocating chillers are adapted with reciprocating compressor from Kirloskar, Emerson and Bitzer. This chillers are fully automatic control based and applicable for process temperature at (+) 15°C to (-) 60°C. These chillers are manufactured by using world class standard heat exchanger and refrigerant control device. These machines are designed on the base of CFC free.

Features:

- ▶ Environment friendly refrigerant R- 134a / R-404a / R-407c available.
- >> Electronic expansion valves for larger capacities for energy efficiency and precise temperature control.
- Multiple refrigeration units including fluid pump and storage tank on skid.
- ▶ High fouling factors, increased condensing area, extra tube thickness and high-flow design for highest energy efficiency, higher operational reliability and easier maintenance.
- Monologue skid design for extra ruggedness and reliability for mobile operation.
- >> Shell and tube type evaporators with high-flow design, ready to handle fluid debris and suspended particles.
- >> Weather and dust proof designs with IP55 / IP65 level protection through acoustic enclosures available.
- Fully automatic PLC based units with remote operation and data logging facilities available.
- ▶ Automatic, stepped capacity control, through multiple compressor operation from 33% to 100%





Ammonia Chiller

SBC presents a wild series of Ammonia chilling plants for the clients who are looking for a long-lasting investment. These chillers are for large range of application like food, chemical, pharmaceutical, cold storage, ice plant, process cooling, jacket chilling and many more. Our products remanufactured using the superior quality row material which is sourced from the trust-worthy vendors of the market. These products are fabricated in compliance with the international standards of quality which makes these highly effective. Our attentive team uses environment friendly liquid ammonia that will enhance the performance of chilling plant with lots of advantages. Ammonia is opled for this operation because it reduces the environment impact. This is detailed with precision to offer low running cost and widest possibility of choice.



Features

- ▶ Comprises 1, 2 or 3 highly reliable screw and reciprocating compressor in parallel.
- ▶ Available with different configurations including PHE / S&T exchangers.
- >> Consist both outdoor / indoor installation.
- Natural refrigerant NH3 with zero ODP with the highest energy efficiency.
- >> Factory assembled and tested equipment with the option to dismantle and re-commission at site, in case of very large sizes.
- ▶ Customized as per the extreme and sensitive environmental conditions.
- >> Stepped and step less capacity control, from 25% to 100%, adapting precisely to varying process loads.
- ▶ Fully automatic PLC based units with data logging facilities.
- >> This unit is fabricated using painted steel frame welded with press bent metal sheet profiles.
- >> The steel frame is epoxy powder coated.

Cooling Tower

- >> The cooling towers are designed and manufactured for maximum service life, dependability and performance.
- >> They are readily adaptable for any type of water cooling application.
- >> The selection of material for the cooling tower is based on the requirement that they must be completely resistant to corrosion and chemicals.
- This has been achieving through the exclusive use of FRP, PVC and MS HDO/SS supporting status.
- We are having available range of cooling tower from 5 TR to 500 TR capacities to cool water of 3 GPM per TR at range of 5 °C to 8 °C Δt.





Features:

- Easy access to inspection and maintenance
- Finished Body
- ▶ Optimum cooling
- ▶ Ante corrosive nature
- ▶ High tensile strength
- ▶ Long service life
- >> Excellence contact surface area

- Aerodynamically designed FRP fan blades for smooth performance
- Specially designed energy efficient axial type fans with adjustable pitch, made of cast aluminium alloy or FRP
- >> Specially designed for low running cost and low noise level
- >> Energy saving design, Quick and easy installation
- ▶ Overwhelming obligation
- Precise measurements
- ▶ Easy to grip handle

Casing & Basin | Fills | Water Distributions System Fan | Electric Motor | Supporting Structure



Shell & Tube type Condenser & Evaporator

SBC offer Shell and tube Condenser and evaporator which are manufactured and design using the best technological solution as per different application area. The shell manufactured by using heavy duty ERW Mild Steel, Stainless Steel, Carbon Steel pipe or rolled from carbon steel plate (as per requirement) for durable finish standard, robust construction, pre long life and excellent in performance.

The tube is made of special high performance copper, mild steel and stainless steel both internally and externally grooved fins (as per requirement) for low fouling factor with high heat transfer capacity. The offered product is precisely in compliance with ASME & TEMA Code.



Tube Bundles

From 5 TR to 500 TR

- Offered in wide range of capacity (Tonnage of Refrigeration)
- Excellent performance and durability
- Cost effective
- Trouble free operation
- Low maintenance
- Excellent design and finish
 Made of best quality raw material like
 mild steel, copper and stainless steel

Water Cooled Condenser:

Technical Specification: (Shell & Tube type)

Tube MOC: Copper, Stainless Steel and cupronickel (Marine Application) with External grooved.

Tube Outer Dia.: 1/2", 5/8", 3/4". (Customized)

Tube Wall Thickness: 1.2 mm (Customized)

Shell MOC: Mild Steel, Stainless Steel & Carbon Steel.

Tube Pressure Testing: 200 psi for 24 hr.
Shell Pressure Testing: 350 psi for 24 hr.

Evaporator

It is in the evaporators where the actual cooling effect takes place in the refrigeration and the conditioning systems. For many people the evaporator is the main part of the refrigeration system and they consider other parts as less useful. The evaporators are heat exchanger surfaces that transfer the heat from the substance to be cooled to the refrigerant, thus removing the heat from the substance. The evaporators are used for wide variety of diverse applications in refrigeration and air conditioning processes and hence they are available in wide variety of shapes, sizes and designs. They are also classified in different manner depending on the method of feeding the refrigerant, construction of the evaporator, direction of air circulation around the evaporator, application and also the refrigerant control.

Be cooled so the refrigerant gets heated while the substance gets cooled. Even after cooling the substance the temperature of the refrigerant leaving the evaporator is less the than the substance. The refrigerant leaves the evaporator in vapour state, mostly superheated and is absorbed by the compressor.





Shell & Tube

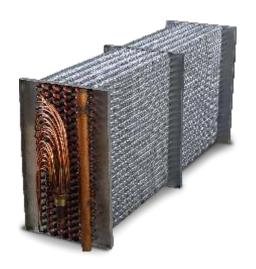


- >> Imported Brazed Type Plate Heat Exchanger.
- **▶▶** Gasket Type Heat Exchanger.
- >> Shell & Tube Type Heat Exchanger.
- >> Coil in Tank Type Heat Exchanger.
- >> Tube in Tube Type Heat Exchanger.



Air Cooled Cooling Coil & Condenser

For more than 10 years, we have been making condenser and evaporator coils for many global air conditioning brands. SBC provides both copper and aluminium tubes with tube O.D. from 7 mm up to 16 mm with various fin patterns for different applications.





Coil Capabilities:

We can handle almost any coil for both air conditioning and refrigeration:

Condenser Coils, Evaporator Coils and Fluid Coolers. **Tube Sizes**: 7 mm, 1/2 inch, 3/8 inch and 5/8 inch.

Tube Thickness: We stock a variety of thicknesses for most tube sizes. (Standard 0.27 mm).

Tube and Fin Materials: Aluminium, copper, copper clad aluminium, cupronickel and stainless steel.

Rows : Customize (as per customer's requirement) starting from 1 Row. **Fin Materials :** Aluminium and copper, and pre-coated aluminium.

Chemical Composition : Copper 98.99% **Fin Edges :** Straight edge and ripple edge.

Fin Surfaces: Plain, flat, corrugated, louver, raise lance, sine wave, sine wave slit surface and super slit.

Fin Spacing: 4 FPI to 12 FPI.

Headers : Aluminium, steel, copper, galvanized iron and stainless steel. **Protective Coatings :** Hydrophilic protective coated fins, gold and blue.

Pressure Testing: 450 PSI for 24 hours.

Types of Coils:

Condenser Coils - Evaporator Coils - Air Handling Unit Coils - Heating Coils

 $\begin{tabular}{ll} \textbf{Coils For Industrial Applications:} In addition to the HVAC / Refrigeration industry, we serve a number of industrial markets: \\ \end{tabular}$

- Aeronautics industry.
- ▶ Beverage, dairy and food processing.
- ▶ Petrochemical and gas compression.
- Power generation.
- RO Plant.
- Pharmaceuticals, Etc.



Air Cooled Condenser

Tube Thickness :- 0.27 mm

Tube MOC: Copper Tube Inner Grooved

Chemical Composition :- 99.98%

Tube O.D :- 3/8" and 1/2"

Fins MOC: - Corrosion Preventive Blue Fins

Fins Thickness :- 0.15 mm
End Plate MOC :- Galvanized Iron

Pressure Testing :- 450 psi. for 24 Hours



We can design or duplicate any types of existing heat exchangers in a variety of materials Features:

- Manufactured with utmost care and perfection
- ▶ Defect free
- ►► Anti-corrosive nature
- >> Stability of control
- Available in different shapes
- Long lasting
- ▶ Perfect finishing



Electrical Panels

Electrical control panels are designed and used to control mechanical equipment. Each one is designed for a specific equipment arrangement and includes devices that allow an operator to control specified equipment.

Electrical panel components control every piece of equipment in every industry. It's difficult to describe all possible combinations because every industry and most companies have defined component preferences.







Features

- ►► High Pressure Cutout set with display.
- ►► Low Pressure Cutout set with display.
- >> Chilled water temperature show in display.
- >> Condenser water temperature show in display.
- ►► Anti-freeze safety with display.
- Digital temperature controller.
- ► Oil level switch and oil differential pressure switch.
- **▶** Discharge temperature protection with its controller.
- **>>** Electronic thermostat embedded in stator coil for motor protection.
- ►► Compressor & pump overloaded trip.
- ▶ Under voltage / over voltage / single phasing preventer / reverse phasing preventer.
- >> Chilled water flow switch.
- >> Cooling water flow switch.
- >> Automatic star delta starter.



PLC Panel (Programmable Logic Controller Panel) Three phase

Electrical Control Panels are designed and used to control mechanical equipment. Each one is designed for a specific equipment arrangement and includes devices that allow an operator to control specified equipment.

Electrical panel components control every piece of equipment in every industry. It's difficult to describe all possible combinations because every industry and most companies have defined component preferences.







Features

- >> PLC panels are designed as per end user requirement.
- Minimizes human interface, thus minimizes the possibility of error.
- >> Whole system can be monitored & controlled at single junction.
- ▶ Data Logging of all process parameters with alarm.
- >> We provide flexibility on make of PLC, we can provide any make of PLC.



Air Handling Unit

Air Handling Unit is the need of the hour. Since, it does the most important function of circulating fresh air, by taking in outside air and conditioning it. The exhaust air which can also be termed as "stale air" is discharged. Thus, it ensures healthy and top notch health as well. The air quality of the indoor is regularly maintained as the air handling unit regularly keeps a check on the safety and health of the inhabitants. In the areas where the need for quality of air is significantly lower, then the unit re-circulates the air though mixing chamber which automatically results in saving of energy over a period of time as well. There are dampers with mixing chamber as they do the basic function of keeping a check on the ratio between the air which is returned, exhausted as well as that of outside air.



Benefits

- ►► Restricts cross contamination.
- ▶ Simple and safe damper for regulating air flow.
- It is a child play to move AHU from one place to another.
- Quick turnaround / installation.
- **▶▶** Cost effective operating costs.
- Occupies minimal floor space.
- Unit operation is reckoned by flashing beacon signifying its working status.



Features

- ▶ **Applications**: Cooling, Heating, Humidification and Ventilation.
- Frame Work: Mainframe of self-supporting hollow extruded aluminium profile.

 Thermal break construction as option.
- Frame Panels: Double Skin CFC / HFC free PUF injected 25 / 43 /50 / 75 mm thick panels. Various skin option available in plain GSS, pre-painted GSS, pre-plasticized GSS, aluminium, stainless steel as per duty requirements.
- Fan Section: Fan Section contains belts driven DIDW Forward / Backward / Aero foil Backward curved Centrifugal Blower & direct driven Plug Fans as per requirement.
- **Fan/Motor Assembly :** Fan and Motor assembly mounted on common base frame of Extruded Aluminium Profile on vibration isolators.
- **Coil Section :** Coil Section designed for CHW / HW / DX high efficiency heat transfer coils.
- >> Drain Pan: Dual Slopping Aluminium / Stainless steel drain pan mounted on PUF insulated bottom panel.
- **Filter Section :** Flat Filter Section designed for Synthetic pleated pre-filters. Choice of filtration available as per required duty conditions levels.
- **Scrubber Section :** Choice of wet & dry scrubber.
- Outdoor Installation : Overhead canopy available for outdoor installation.
- Optional Sections: Mixing chamber For Fresh Air & Return Air mixing. Manual / Motorized controls-optional. Micro 'V' / Hepa / Bag / EU-4 / EU-7 / EU-9 / EU-13 / Special Filtration Section.
- ▶ Heat Recovery Wheel Section.
- ▶► Spray / Pan Humidification Section.
- ▶ Other special sections as per individual customer requirement.



Fan Coil Unit

A **Fan Coil Unit** (FCU) is a device that uses a coil and a fan to heat or cool a room without connecting to ductwork. Indoor air moves over the coil, which heats or cools the air before pushing it back out into the room. FCUs can be less expensive to install than ducted systems and are available in ceiling, floor-mounted and freestanding configurations.





- ▶ Wide range of 8 models 1, 1.5, 2, 2.5, 3, 3.5, 4, 5 TR
- ► Whisper quiet operation and energy efficient
- ▶ Ultra low height
- Detachable fan panel ensures ease of service of fan motor and coil
- ▶ High indoor air quality
- ▶ Galvanized powder coated cabinet
- ▶ High quality stainless steel drain pan (Galvanized steel finish option also available)

Options available in Fan Coil Units:

- (a) 3 row cooling
- (b) 4 row cooling
- (c) 3 row cooling and 1 row heating



Ductable Type Unit

The SBC Cooling range of Packaged and Ductable Units are designed to be the most intelligent and Compact systems, to cater to the total cooling requirements. Application include offices, banks, departmental stores, entertainment centers, multiplexes, restaurant, fast food center, residences, computer rooms, telephone exchanges, hospitals, auditoriums, conference halls, theatres, factories, control rooms, etc.







These units are available in both Air-cooled and Water-cooled options.

Cooling Capacity: 2 TR to 17 TR

All models are also available in R-407c / R-410a Refrigerant

 ${\bf Energy} \ {\bf Efficient}$: Ensures the comfort cooling by shutting and starting

while reaching desire temp as set by ± 2°C

Compact : Better cooling with lesser indoor and outdoor space. **Reliability :** Our design are best in class with high level of reliability.

Humidity Control: By using inbuilt pan and spray type humidifier when and as needed. **Digital Temp. Controller:** For easy operation SBC Cooling provide standard range of

DTC for maintaining temp, air flow and humidity control.

Fan Speed Selection : Controls high / medium / low flow of fan. **Motor Protection Device :** Give safety from power fluctuation.

Equalizer: Our fully automatic controller ensures.



Cold Room / Blast Room / Small Room

Cold Storage is a great place to store fruits, vegetable Dairy Products and see foods as well as other products as they prolong life and help prevent spoilage of foods. Get contractor-friendly products & solutions built with market leading expertise that are available everywhere and enable you to comply easily with regulations and save on installation and maintenance. Make the right choice for optimum protection of perishables, efficient operation and long lifespan. With an extensive range of refrigeration solutions, experience and know-how, SBC is a competent and trustworthy partner for the cold room storage industry. Explore our solutions for reliable cold rooms and walk-in refrigerators below.

Temperature Range:

Blast Freezer: -35°C to -65°C Temperature Freezer Room: -18°C to -25°C Temperature Chiller Room: 2°C to 8°C Temperature

Ripening Room: Depend On Product (Customised)

Puff Thickness Size: 60, 80, 100, 125 & 150 mm

Surface Material: GI Pre-Painted Sheet, SS Sheet (Grade

304/316), GI Plain Sheet and galvanize. (Inside & Outside different

metal can be placed as per your requirement).

Floor:

- For Kota stone or concrete floor, Puf Slab with both side tar felt coated.
- For Kota stone or concrete floor, both side metal surface panel in which each side fits with cam lock and prevent temperature loss.
- >> Aluminum Chequered Plate with Marine Ply.
- FRP Cladding on floor.

Door:

Flush Type: Swing Door with FRP Profile, Imported Hardware.

Push Type : Gasket & replaceable heater for easy door operation & long life. Over Lap Type: Teak wood frame with metal covering by using heavy duty

hardware for better strength.

Sliding Door: Sliding Doors are very easy to operate, greater in

efficiency and better in performance. Also, In terms of safety, long service life

and smooth in operation.

Door Size: Thickness: 60 mm, 80 mm, 100 mm, 125 mm to 150 mm.

Height: 2100 to 3000 mm.

Width: 870/1200/1500/1800 mm.

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

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 up to -20°C inside the cold room.

Strip Curtain: Semitransparent PVC strip curtain for minus temperature application to prevent heat loss and ultimately the power.





Technical Specification:

Sr. No.	Parameters	Description		
1	Average PUF Density	40 ± 2 Kg/m³		
2	PUF Blowing Agent	141B (CFC free)		
3	Insulation Material	Polyurethane foam		
4	Temperature range	+90°C to -60°C		
5	Penal Type	Discontinuous type with cam-lock		
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 134"(Maximum Length)		
9	Length of wall & ceiling panel	2032 mm to 6160 mm 80" to 242.5" 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 Resistance	FR Grade (Fire Resistance 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	Bending Strength	10mm (For PUF only)		
18	Adhesive Strength (Foam to Sheet)	2.9 kg / m2		
19	Dimension Stability	Less than 2%		
20	Panel Facing Availability	With Rib or plain on Demand (Ribs are provided for more strength)		





Condensing Unit & Evaporator

Processed food industries segments like poultry, Marine and meet processing heavy duty operation, while the ice-cream industries are growing by leaps and bounds and needs significant storage facilities of production and distribution point. To tackle these critical temperature requirement.

SBC Cooling Condensing Unit and Evaporator are very efficient and require minimum floor space and head space. These are easy to maintain; hence they are very widely used in medium to large capacity refrigeration systems.

We offer a premium range of condensing unit and evaporator. This has wide application for comfort / industrial A.C plants, cold room and clean room. These units are manufactured by using latest technology and can stand with high pressure and temperature.

▶► From 5 TR to 50 TR



Condensing Unit

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

Evaporator (From 5 TR to 50 TR)

Fan : High reliability, lower temperature resistance and low noise external rotor fan.

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 end and anti-electrical leakage and long life.

Unit body: Aluminium, PU type powder coated, corrosion resistant and nice appearance body.

Maintenance: Compact, adjustable and easy openable side panels for easy installation and maintenance.



SBC Cooling Pvt. Ltd. complete HVAC/R solution







EVAPORATOR

Designed for your needs ! Cooling System



Refrigerator Van:

SBC Cooling Pvt. Ltd. is now bringing forward new-age insulated truck bodies that will offer superior insulation quality and lower maintenance costs without compromising on strength. Customers will benefit through increase payloads, better fuel efficiency and reduced running of the refrigeration unit.

These bodies are designed for Indian Road conditions and engineered to suit all type of chassis as per customers requirement. The Vehicle body dimensions and design are precision adjusted to suit cargo requirement.

These insulated bodies are designed and engineered to suit all type of chassis as per customers requirement. The vehicle body dimensions and precision adjusted to suit requirement.



- GRP, Stainless Steel, Aluminium and GI used for the inner and outer skin.
- Flooring options include Aluminium T Profile, GRP, Aluminium Checkered Plate and Stainless Steel.
- >> The insulation material is Polyurethane.
- Good quality electrical fitting inside and outside.
- Use of food safe and hygienic material inside.
- >> Continuous sealing using adhesives along with mechanical fasteners to ensure sturdiness of the box.
- >> Customized options such as lashing rails, hooks, PVC air curtain, partitions, side door, hatch door, etc. available.
- Refrigerated Van are designed in such a way to meet international quality standard for transformation with the temperature range (+15°C to-30°C)

Type Of Refrigerated Van

- Engine Driven With Electrical Power Standby Refrigerated van
- ▶ Eutectic Type Refrigerated Van
- >> Freeze On Wheel Refrigerated van

Type of Construction

Heavy structure with Pre-Fabricated Sandwich Panels with Cam Lock on all Side All Panel Fit together by cam lock, so Container become air-tight fit

Panel Thickness

Insulated Wall thickness, 80 mm (Small Vehicle), 100 mm (mini Truck) & 125 mm (heavy Loading Truck)

Panel Surface Material

Inside / Outside Pre-Coated GI sheet skin thickness 0.8 mm or SS Grade 304, Thickness 0.5 mm $\,$

Type of Floor

Aluminium T' Profile For Easy Moving & Air Rotation Aluminium Checkered Plate. SS-202 rectangle pipe structure for better easy moving & Air Rotation Aluminium Corrugated Profile

Door & Hatch Door

Single & Double loft (Fully Open) Insulated Door, Hatch Door, (Windows) & Side Door Fitted with Double Gasket with Heavy door locking mechanisms for special transport segment. Door 'T' Handle Gear. Rear Door hinges and rear door hinges bracket, seal rubber gasket.

FOW (Freeze On Wheels)

- Use of high latent heat phase change Material (PCM) technology keeps product temperature maintained at -20°C for 12 hours journey time.
- >> Ice cream worth Rs. 2 Lakh at a time can be transported for 12 to 14 hours duration and daily electricity cost for single charging is less than Rs. 150/-
- Can be used for more than 30 deliveries in a single day with more than 60 door openings.
- >> Totally environment friendly refrigeration, no carbon emission, runs on electricity only.
- Maintains a healthy -25°C to -20°C during ice cream distribution period of 12 hours.
- LOW CAPEX (Capital Expenditure), LOW OPEX (Operating Expenditure). High on PROFITS.
- » As the refrigeration unit does not use engine power, more engine power is available for vehicle.
- Incise of vehicle breakdown, FOW can be easily unloaded from the vehicle and shifted to other vehicle within a few minutes.
- >> FOW can be sent anywhere in India from our factory, no need to send your vehicle to us for installation.
- Product Application: Ice Cream, Poultry, Meat Products, Bakery, Pharmaceuticals, Dairy Product, Ice distribution etc.
- >> Zero maintenance.



Designed for your need Cooling System



Bulk Milk Chillers / Coolers

We offer a range of Milk Cooling Tank which is also known as Bulk Milk Coolers. Owing to the rich industrial experience, we are leading manufacturer of Bulk Milk Coolers. Bulk Milk Coolers are direct expansion type, capacity in 250 liters to 10,000 liters. These milk cooling tanks are for installing at village Dairy Co-operative Society which collects the milk everyday in the morning and evening from milk producers. The Milk collected shall be stored in the bulk milk cooler and cooled from the ambient temperature to 4°C within 4 hours.

Our Milk cooling tank is mainly used in preserving and storing fresh raw milk. The cooled raw milk can reach rapidly needed temperature of 4-5°C and keeps constant, which can prevent the generation of bacteria and keep raw milk in good condition. These excellent bulk milk coolers, which help in improving milk quality by cooling it at collection center before it gets transported to the dairies.

We are foremost milk cooling tank manufacturer in India at the core of the company's extensive range of dairy products. Manufacturing quality, finish and cooling efficiency ensures that our tanks stand out from the rest. To reinforce our commitment to total quality, whereas the tank has been made of SS 304 with adequate thickness to ensure robustness, durability & adaptability, due care has been taken while selecting the compressor, condensing unit, agitator motor and other parts to ensure trouble-free service to the Bulk Milk Chiller / Coolers.



- Capacity in 250 liters to 10,000 liters
- Cooling Maintain 4-5°C within 4 Hours
- Structure inner to outside SS (Inner), Copper coil, Puff Insulation, SS (Outside)





Features:

- Maintain Freshness of Milk
- ▶ Faster Cooling owing to Direct Expansion
- ▶ Digital Temperature Controller
- Robust Design
- ▶ Easy Maintain, Non Icing Cooling Even With Low Filling Level

Tank Details

- >> Designed and manufactured as per standards.
- >> Circular & rectangular tank with 304 grade SS material.
- >> Special evaporator with spot welding and seam welding.
- >> Suitable for two milking.
- Top cover of B.M.C. has provided Proper stiffening pipe & two holes for milk inlet.
- >> Outlet connection with Butterfly Valve.
- ▶ Engraved SS dip stick for measuring quantity of milk is provided.
- Insulated with 40 kg. cu. mtr. Density puff material.
- → Four nos. legs with 50 mm level adjustment. Tank capacities available — 250 Liters to 10,000 Liters.

Condensing Unit Details Control Panel

- >> Sealed compressors of reputed make Mounting on condensing unit itself.
- ▶ Air cooled condenser Can be operating auto / manual mode.
- ▶ Split design, easy to install Digital temperature indicator & controller.
- >> With safety devices.
- >> Optional cyclic agitation can be provided.

Agitator

- >> Free from vibration and noise.
- Maintain equal temperature throughout the tank.



Display Counter

Proper display of food items not only provide visibility to customers helping you boost sales but it also plays important role in handling and storage. Our display units have a glass windows with sliding doors and appropriate lighting inside the cabinet. Our designs are user friendly for cleaning and storing. Their mobility also helps you to use the available store space as per convenience. Fast Food and bakery producers use our counters for the obvious advantages. We provide Self Service Counters, Fast Food Service Counters, Bain Marie Service Counters, Sandwich Counters, Chat Counters, Panipuri and Bhel Counters, Juice Counters and Pastry Counters.

Outfitted with a modern infrastructure, we are known as the most prominent manufacturer, trader, exporter and supplier of supreme quality **Display Cold Counter**. Our offered product is highly demanded for its instant cooling capabilities. It is manufactured with the help of optimum quality components and other raw material under the supervision our skilled experts. Further, the offered counter is thoroughly tested on various quality parameters by our skilled quality controllers to make sure that it is ready for use or not.

We are manufacturing and supplying a comprehensive range of **Display Counter**. Our customers can avail these counters in Normal, Cold from us. Moreover, we also customize our product range as per the required specifications and requirements of our customers.

Features

- ▶ 0.5 mm Stainless sheet, 1 mm SWG Steel 304 Food Grade
- Water Drain System
- >> Top Granite According to Customer Requirement
- >> 2.25" Puffed Insulation 38 Density
- Glass Model Available (C) Molding Glass (J), Molding Glass (S), Molding Glass, Square Model Flat Toughen Glass
- ▶ Digital Temperature Controller
- ▶ Sliding Door
- ▶ Each shelf L.E.D Lighting System
- >> Compressor Unit Emerson / Danfoss / Tecumseh



Material	Stainless Steel	
No. of Shelves	Customise	
Usage/Application	Sweet Shops, Bakeries,	
	Restaurants and many more	
Counter Shape	Curve, Rectangular, Square	
Pattern	Plain	
Surface Treatment	Polished	



Manufacturer of a wide range of products which include cake display counter, SS glass display counter, 3 shelf pastry display counter, bend glass display counter, sweet display counter and sweets display counter.

Model Available in two types of technology:

- 1. FORCED DRAFT TECHNOLOGY-Cooling Coil With Fans For proper in and out air circulation.
- 2. Static Cooling Technology-copper pipe based cooling.

Water Cooler





Models Available From 10 Liters to 500 Liters Fully SS 304 Body Inner & Outer Structure is Made from Stainless Steel Designed to be user Friendly

Model	Storage	Cooling	Gas	Сар	Size	Тар
SBC - 10	10	10	R - 134a	10	11" X 11" X 36"	1
SBC - 15	15	15	R - 134a	15	12" X 12" X 37"	1
SBC - 20	20	20	R - 134a	20	14" X 14" X 39"	1
SBC - 30	30	30	R - 134a	30	16" X 14" X 41"	1
SBC - 40	40	40	R - 134a	40	17" X 17" X 46"	2
SBC - 60	60	60	R - 134a	60	17" X 18" X 50"	2
SBC - 80	80	80	R – 407c	80	20" X 18" X 52"	2
SBC - 100	100	100	R – 407c	100	25" X 18" X 52"	2
SBC - 150	150	150	R – 407c	150	31" X 20" X 52"	3
SBC - 200	200	200	R – 407c	200	34" X 22" X 52"	3
SBC - 300	300	300	R – 407c	300	36" X 26" X 52"	4
SBC - 400	400	400	R – 407c	400	42" X 30" X 52"	4
SBC - 500	500	500	R – 407c	500	45"X 34" X 60"	4



Also available in special design & capacity with RO Space as per requirement.

Features

- Cooling retention. A unique In-situ PUF insulation ensures that water remains cool for a longer period in case of power outage and hence saves power.
- ▶ Eco Friendly Refrigerant.
- Durable Tank.
- Faster Cooling.
- Aesthetic & Compact Design.
- Normal & Cold Water option.



Deep Freezer / Vertical Freezer

In order to fulfill the needs of our clients we bring out a comprehensive range of Deep Freezer. Manufactured using high graded raw materials, these kitchenware equipment's are used for chilling ice creams, preserving dairy products and keeping various food items. With various size capacities, colours and specifications these are also available in user specified forms. Quality stainless steel is used to manufacture the inner chamber of thick gauge and is duly polished and welded to make them completely leak proof.



Features

Cooling coils are placed between foamed-in-place PUF insulation and inner side of stainless steel chamber eliminating any chances of FROST FORMATION on the evaporator which leads to choking of COMPRESSOR / CONDENSING UNIT.

- High density foamed-in-place polyurethane foam (PUF) insulation for minimum cooling losses.
- >> Evenly spread evaporator accounts for higher temperature uniformities throughout the cooling chamber.
- Specially designed DEEP FREEZER HORIZONTAL LATCHES to keep the door tightly locked eliminating chances of any cooling loss Outer made of powder coated GI & Steel Sheet.

- Inner chamber made of stainless steel (SS-304).
- ▶ ECO FRIENDLY COMPRESSOR with CFC-FREE refrigerant.
- Fitted with Digital Temperature Indicator-cum-Controller with in-built High / Low.
- Long Lasting Performance
- Corrosion Resistance
- Low Power Consumption

Technical Specification

Model	Capacity Dimension (W X D X H)		No. Of Door
SBC- DF - 250	250	36" X 24" X 36"	1
SBC- DF - 500	450	57" X 25" X 36"	2
SBC- DF - 650	600	67" X 25" X 38"	2
SBC- DF - 800	750	75" X 29" X 39"	3
SBC- DF - 1000	950	81" X 30" X 40"	3





As per expect requirements of our client. We are offering a board collection of SS-304 & above door Vertical freezer with complete SS-304 inner and outer body. This product is developed at our manufacturing unit by highly skilled engineer in this domain. We are offering finest quality components and progressive technology. Offered products are accessible in varied specification as per need of customers. Our products are acknowledged among customers for their uses / benefit.

Technical Specification

Model	Capacity (Ltr.)	Dimension (W X D X H)	No. Of Door
SBC- VF - 600	600	40" X 25" X 72"	2
SBC- VF - 800	800	48" X 25" X 72"	4
SBC- VF - 1000	1000	48" X 26" X 84"	4
SBC- VF - 1200	1200	53" X 30" X 84"	4
SBC- VF - 1500	1500	62" X 30" X 84"	6

Features

- ▶ Perfect Cooling
- Attractive Design
- >> Rust Resistance
- ▶ Low Power Consumption
- >> Long Lasting Performance

Technical Specifications & Ordering Information For Deep Freezer & Vertical Freezer

Temperature range (in AC Room)	Ambient to -20°C or -30°C or -40°C(as ordered)		
Temperature Accuracy	±1°C		
MOC Outer	Stainless Steel Sheet (SS-304) / GI		
MOC Inner	Chamber Stainless Sheet (SS-304)		
Insulation	High Density PUF insulation for tighter temperature controls.		
Temperature Control	Digital Temperature Indicator-cum- Controller with in-built 1-1I/LOW Temperature deviation alarm.		
Display	Digital LED Set value (SV) & Process value (PV)		





Visi Cooler

It's the best way to cool your products and view them at the same time. SBC Cooling range of Visi Coolers are specially designed to cool uniformly and help you to display the products inside. So while the display increases product visibility the visibility increase sales.

And more sales means more profit for you.





Features

- >> UV protected galvanize door MS sheets for interior and exterior.
- ▶ Adjustable plastic-coated wire mesh shelves.
- ▶ Energy-efficient cooling unit.
- ► Eco-friendly refrigerant (R-134a).
- >> Uniform cooling by forced air circulation.
- Clear product visibility with dual glass.
- Self-closing door.
- >> Canopy for merchandising with rear illumination.
- >> Tested for higher ambient and outdoor condition..

Designed for your needs !

Cooling System

Technical Specification

Model	Capacity (Ltr.)	Dimension (W X D X H)	No. Of Door	Temperature
SBCV 200	200	20" X 23" X 54"	1	
SBCV 300	300	23" X 25" X 64"	1	
SBCV 400	400	26" X 25" X 76"	1	+2°C to +6°C
SBCV 625	625	36" X 29" X 85"	2	+2 C 10 +6 C
SBCV 1100	1100	48" X 28" X 77"	2	
SBCV 1500	1500	81" X 28" X 78"	3	

Panel Air Condition

General Characteristics:

Air Flow: Two independent air circuits, the internal circuit circulates cool Air in the panel and the external air circuit dissipates extracted heat to the atmosphere (special ductable models available to expel condenser hot air to other locations)

Cooling Circuit:

Includes sealed compressor, metering device and associated refrigeration equipment.

Temperature Control:

Microprocessor Controller with programming through multi-function keys and alphanumeric display with easy access man / machine interface. Digital display of actual and set temperature values. Stores parameter / programmed values in non-volatile memory adjustable time delay between starts warranting the minimum time for temperature equilibrium and compressor start-ups. Thermostat (electronic or electro-mechanical) in models where space constraints do not permit the use of microprocessor controller.

Drain Pipe: To remove moisture / condensate in the panel.





Features:

- >> Potential free alarm for high and low temperature.
- ▶ High / Low pressure switch.
- >> Fan failure alarm module.
- ▶ Door limit switch interface.
- → Aluminium body (telecom applications)
- >> Stainless Steel body (coastal areas, food processing and pharmaceutical applications).
- >> Low humidity module.
- >> Water-cooled condenser for high ambient environment.
- >> Custom built size for replacement of imported units and
- >> Special applications.
- >> GI Powder Coated Body.
- → High Sensible Cooling.
- >> High Static Backward Curved Fan.
- >> Fully Programmable Microcontroller.
- → Over/Under load Protection.

Capacity:

Panel Air Conditioners are available in various capacities viz., 100 to 15,000 W.

Application For:

- CNC Machine
- Textile Machine
- >> Telecom ODC
- ▶ Small Server
- ▶ Electronic Panel
- → Telecom ODC





SBC Cooling Pvt. Ltd.

Complete HVAC/R Solution





























































































































































































































































































Factory / Warehouse

Plot No. 222-225, Part 1
Om Textile Park, Post. - Parab, Tal. - Kamrej
National High No. 8 to Umbhel Road
Surat - 394 325. (Gujarat) INDIA

Cell.: +91 85111 48248 Web: www.sbccindia.com

Head Office

98, Khatodara GIDC, B/H Sub Jail Ring Road, Surat - 395 002. (Gujarat) INDIA Cell.: +91 85111 48243 / +91 85111 44400 E-mail: info@sbccindia.com surat.sbc@gmail.com Web: www.sbccindia.com

Service no: +91 98250 51800

BRANCH OFFICE

BANGALORE I CHENNAI I KOLKATA I MUMBAI I PUNE I RATLAM (M.P.) I VADODARA I VAPI