Cooling Tower
Natural Draft Cooling Tower

Natural Draft cooling towers are inevitable for the economic generation of electricity under environmental aspects. Our natural draft wet cooling towers have been used to cool water, primarily in energy production, for almost 2 decades.

The tower operates on the stack effect which causes the hot air in the tower to naturally draft. The necessary stack can be designed in various ways. For both technical and cost reasons, reinforced concrete structures have become standard to handle the high cooling water flow rates from increasingly large power generating units.

The required air stream volume for cooling is exclusively produced by the stack effect. The unique economic advantage of natural draft cooling towers lies in their very low electric energy requirement this makes the operating costs minimal. The almost complete lack of moving parts allows for high operating reliability and minimal maintenance requirements and owing to the height of the warm air outlet point the surrounding area remains untroubled by effects of the cooling system.

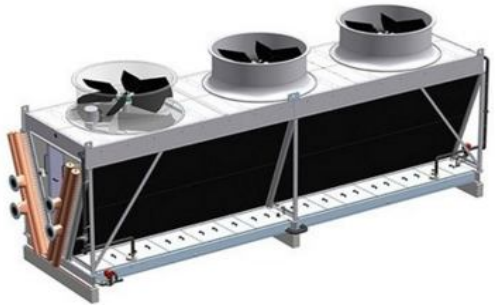
Applications

- Oil Refineries Plants
- Chemical Plants
- Petrochemical Plants
- Thermal Power Stations
- HVAC Industries

We Offered Natural Draft Major Spare Parts

- FRP Louver
- Galvanized Structural Steels
- SS Fasteners
- Nozzle Pipes
- Spraying Nozzles

Dry Cooling Tower



Cooling tower transfers heat from hot water to dry air by means of convection and evaporation and are often part of a total cooling package in combination with one or more of our heat exchangers. We can produce a complete turnkey system with the cooling tower, heat exchanger, water pumps, fan motor, fluid temperature controllers, variable speed fan drives, pressure and temperature gauges, automatic water treatment, all mounted on one galvanised skid needing only connection to power and water. The cooling towers are built with safety in mind as well as performance. Very low noise level cooling towers are available.

Dry Cooling Tower Features

- Coil mounted on the ISO standard channels. Coils connected with parallel and serial.
- Fan and Motor are mounted on the top of the frame. Fan has been dynamically balanced with the motor's rotation RPM.
- After the manufacture of the coil, BCS conducts a Hydro-Pressure Test to see if there are any leakage in the tubes.
- Tube bending joints are brazed by qualified welders. In this bended area thinning calculated for min thickness at the particular area.
- Powder coated Frames and Sheet Metal work.
- In suction of air passing side fixed grid for security for finns . At the top of the area motor side fixed bird screen grid .
- Inlet and Outlet Nozzle are welded with coil, after welding area examined by NDE(Penetrant test).
- Hydro-Pressure Test conducted after assembling the cooling tower at 21 kg/cm^2 (300 psi).
- Minimal water consumption.

Data Requirement For Design Construction:

- Flow Rate (LPM)
- Inlet Temperature (°C)
- Outlet Temperature (°C)
- DBT (°C)

Advantages

- Reduced water consumption
- Reduces energy consumption compares to Dry equipment
- Plume abatement
- Reduced maintenance
- Legionella risks minimised

Application

- Power generation units (Megawatt projects)
- Steel Casting Foundries/Steel Plant (MS Ingot/Billet Mfg)
- Diesel/Gas generators
- Air compressor cooling/after cooler/inter cooler/jacket cooler.
- Heat Treatment Furnaces (Forging Unit)
- Special process applications
- Rubber Industries

Service Cooling Tower

We have specialized doing service for TIMBER COOLING TOWER and FRP cooling tower as per your existing size.

Our special key features

- Service will conduct only expert timber workers
- Cleaning provisions will do perfectly
- Timbers materials are chemical treated .
- We have using decaling compound for cleaning .
- Better cost compare than other competitors
- Quality and Performance is our moto .

Frp Cooling Tower

BCS is one of the leading manufacturers of compact and space saving FRP cooling towers. In FRP cooling towers, multiple fibers are joined mutually and are available in form of mat. The mat is joined together with polyester resin, accelerator and catalyst. We deal with both Round Shaped and Square shaped towers

Round Shaped Frp Cooling Towers

Being round, the airflow through the towers is more evenly distributed. Structural members do not interrupt air intake and therefore they have been proven to be thermodynamically the most efficient design in the field. This translated directly into reducing running costs. The towers offers PVC fills and eliminators in a design that maximizes economy and efficiency. The counter flow design facilitates low pump heads. The water is distributed inside the towers over the fill area through the self rotating sprinkler so as to give an even distribution over the complete fill area.

Frp Cooling Tower Better Features And Performance

- Starting with small size of 10 TR to large sizes of up to 1000 TR our product ranges include 10 TR, 15 TR, 20 TR, 25 TR, 30 TR, 50 TR, 80 TR, 100 TR, 150 TR, 200 TR, 250 TR, 300 TR, 350 TR, 400 TR, 500 TR, 800 TR, 1000 TR.
- We have experienced FRP molders capable of producing a strong bond of fibre matrix with Resin matrix.
- Our FRP Cooling Towers easily remove heat from the process.
- All the Steel material used are GALVANIZED for anti corrosion purpose.
- We have experienced FRP COOLING TOWER ERECTION TEAM who will aid you in erection and commissioning for avoiding extra days in the run process.
- We follow the performance of the supplied FRP Cooling Towers and monitor them periodically.

Square Shaped Cooling Frp Cooling Towers

The FRP square type Cooling towers we offer have fixed targeted nozzles in the hot water basin. They are designed meticulously for water distribution and are highly resistant to temperature and weathering. The use of targeted nozzles eliminates the need for separate diffusion deck. These FRP square type cooling towers are preferred for minimum drift losses, easy accessibility of internal components, high thermodynamic efficiency and low power requirements. Easy to maintain, these FRP square type cooling towers can be installed on rooftops.

Advantage Of Frp Cooling Tower

- Corrosion resistance
- Light Weight
- Electromagnetic Neutrality
- Thermal insulation
- Structure build in any area like sea region, top of the sealing area etc
- Against De-Scaling

Data Requirement For Design

- Volume Flow rate (LPM)
- Inlet Temperature (°C)
- Outlet Temperature (°C)
- Wet Bulb Temperature (°C)

Major Spare Parts That We Provide

- Cooling Tower Motor (0.5 HP, 1 HP, 1.5 HP, 2 HP, 3 HP, 5 HP, 7.5 HP, 10 HP, 15 HP)
- Geometric Fans (Aluminum/PVC) (4-Leaf, 6-Leaf)
- Hub (Aluminum/PVC)
- Sprinkler (Aluminum/PVC)
- Honeycomb Fills-High Temperature Range
- Drifting Fills
- Nozzles-PVC
- Galvanized Steel Structure

Timber Cooling Tower

BCS offer Timber Frame Counterflow and Crossflow Water Cooling Towers for large industrial applications. These towers are available as bespoke designs to suit an existing concrete basin or special site layout. The heat transfer surfaces is either film flow or splash flow plastic as dictated by water analysis of the circulating water. All towers are designed in accordance with OHSAS demands and supplied to quality assurance programmes. Timber Cooling towers are useful for chemical plants, air conditioning plants, induction furnace, injection moulding machine, chilling plants, oxygen plants. diesel generating sets and heat exchangers. And also for steel industries, cement industries, chemical industries, and water effluent treatment industries.

Timber Cooling Tower Better Features

- 95% of the timber material that is used by BSC is Pinewood.
- Pinewood has the capacity to withstand a high temperature range of 55-90°C.
- Heat is easily dissipated from the process.
- The Pinewood that we use undergoes a number of chemical treatment process. It is dipped for about an hour in stainless steel slump in order to remove any fungi and bacteria. After it undergoes the chemical treatment process it is then moved to remove the moisture from the timber.
- All the steel material is GALVANIZED for anti corrosion purpose.
- We have experienced TIMBER OOLING TOWER ERECTION TEAM who will aid in the easy erection and commissioning within the estimated time.
- We supply Timber Cooling Towers to Customers every month and follow up for periodic maintenance and performance testing.

Data Requirement For Design

- Volume Flow rate (Kg/Hr)
- Inlet Temperature (°C)
- Outlet Temperature (°C)
- Wet Bulb Temperature (°C)
- Hot water Line Size (mm/inch)

Timber Cooling Tower Spare Parts

- Pine Wood Timber
- High temperature Fills
- Louver Grid (FRP/SS)
- Reducer Gear Box
- Geometry Fan (Aluminium /FRP)
- Hub (Aluminium / FRP)

- SS Bolt & Nut and Nails
- Motor
- Spraying Nozzles
- Nozzle Pipes
- Galvanized Structure Steels