



### **MOULDED FRP COOLING TOWERS**



"GLOBAL LEADER IN DESIGNING, MANUFACTURING AND SUPPLY OF COOLING TOWERS AND ALLIED UTILITY SOLUTIONS"





BLUECHIP make Counter Flow Cooling Tower is a cooling system where the flow of air and water moves in opposite directions, enabling efficient heat exchange. Hot water enters at the top and flows downward through the fill media, while air is drawn upward from the bottom, directly opposing the water flow. Counterflow cooling towers are valued for their superior cooling efficiency and space-saving design, making them ideal for high-performance cooling needs in industrial and commercial settings.

Our FRP Induced Draft Cooling Towers Are Engineered For Superior Thermal Efficiency And Ease Of Use. Manufactured In Our State - Of - The - Art Facility With Stringent Quality Controls And Premium Raw Materials, These Towers Deliver Reliable Performance And Durability.

### KEY FEATURES OF BLUE CHIP MAKE INDUCED DRAFT COUNTER FLOW TYPE MOLDED FRP COOLING TOWER:

- ❖ TOTAL 23 MODEL NOS. OF THE COOLING TOWER DEPENDING ON THE SIZE AND DUTY CONDITIONS.
- ASSURED PERFORMANCE.
- ❖ CORROSION FREE, COMPACT, LIGHT WEIGHT FRP CONSTRUCTION.
- **❖ MAINTENANCE FREE STEADY DISTRIBUTION SYSTEM.**
- CAPACITY FROM SINGLE CELL 5 TR TO SINGLE CELL 750
- MULTI-CELL CUSTOMIZED CAPACITY CAN BE DESIGNED BASIS SITE CONDITIONS.



#### **TECHNICAL SPECIFICATIONS:**

| SPECIFICATION               | DETAILS   |  |  |
|-----------------------------|---|--|--|
| Cooling Capacity            | Customizable (5 – 800 TR) Per Cell Capacity               |  |  |
| Flow Rate                   | 3 CMH to 500 CMH Per Cell Capacity                        |  |  |
| Material Options            | Moulded FRP   |  |  |
| Noise Levels                | Low-Noise Operation (<85 dBA)                             |  |  |
| Water Drift Loss            | <0.001%   |  |  |
| Operating Temperature Range | Suitable for Extreme Conditions (3 Degrees to 75 Degrees) |  |  |





### SPECIFICATIONS & COMPONENTS OF OUR INDUCED DRAFT MOLDED FRP COOLING TOWER

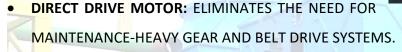
#### 1. DESIGN

- **HIGH PERFORMANCE:** DESIGNED FOR LOW CAPEX AND OPEX WITH HIGH THERMAL EFFICIENCY.
- COUNTER-FLOW CONFIGURATION: ENSURES

  OPTIMAL PERFORMANCE WITH UNIFORM WATER

  DISTRIBUTION AND EFFICIENT HEAT TRANSFER.
- TAPERED AIR EXIT: CONTROLS AIR EXIT VELOCITY

  AND REDUCES PRESSURE DROP.





#### 2. FILLS & DRIFT ELIMINATORS

- EFFICIENT COOLING: MADE OF RIGID PVC IN A HONEYCOMB
   DESIGN TO MAXIMIZE CONTACT TIME BETWEEN AIR AND
   WATER.
- STRENGTH: BUILT TO WITHSTAND VARIOUS FORCES AND IMPACTS.
- DURABILITY: CONSTRUCTED FROM SEGMENTS OF FRP USING HIGH-QUALITY RESINS FOR STRENGTH AND LONG SYSTEM LIFE.



- MODULAR DESIGN: ALLOWS FOR EASY MAINTENANCE AND QUICK REFITTING WITH MINIMAL AIR PRESSURE DROP.
- CUSTOMIZATION: AVAILABLE IN 12, 19, 27 MM CONFIGURATIONS BASED ON SYSTEM DESIGN AND USER REQUIREMENTS.
- WATER LOSS REDUCTION: CRAFTED FROM RIGID PVC TO MINIMIZE WATER CARRY-OVER LOSSES.
   ENSURES MIST CARRYOVER IS LESS THAN 0.005% OF THE CIRCULATING WATER FLOW RATE.





#### 3. FILLS AND DRIFT ELIMINATORS SUPPORT

ROBUST SUPPORT: MADE FROM HDG STEEL TO PREVENT FILL COLLAPSE DURING OPERATION,
 AVOIDING SUSPENDED 'C' CHANNEL SYSTEMS.





#### 4. WATER DISTRIBUTION SYSTEM

- CONSISTENT DISTRIBUTION: UTILIZES STATIC PIPES WITH MULTIPLE BRANCH ARMS AND POLYPROPYLENE SPRAY NOZZLES FOR EVEN WATER SPREAD.
- VERSATILE MATERIALS: CAN BE DESIGNED IN GI, PVC, PP, SS 304, AND OTHER MATERIALS BASED ON SYSTEM REQUIREMENTS.













#### 5. FAN ASSEMBLY

- AXIAL FLOW DESIGN: FEATURES A FAN MADE FROM CAST ALUMINIUM ALLOY OR HOLLOW FRP, BALANCED FOR STATIC AND DYNAMIC PERFORMANCE.
- HIGH EFFICIENCY: ACHIEVES
   HIGHER AIR PULLING EFFICIENCY AT

   LOW OPERATING POWER.





#### 6. FAN DRIVE MOTOR



- WEATHERPROOF AND DURABLE: AVAILABLE IN A T.E.F.C. WEATHERPROOF, IP-55 ENCLOSURE WITH CLASS 'F' INSULATION, SUITABLE FOR OUTDOOR INSTALLATIONS.
- MAINTENANCE FREE: ELIMINATES THE NEED FOR V-BELTS OR GEAR DRIVES.

#### 7. INSPECTION / ACCESS WINDOW

EASY MAINTENANCE: PROVIDES CONVENIENT ACCESS FOR MAINTENANCE AND PERIODIC INSPECTION WITHOUT INTERRUPTING NORMAL OPERATION.

#### 8. BASIN

- PREFABRICATED FOR QUICK INSTALLATION: MADE FROM FRP
  WITH INCLUDED FITTINGS SUCH AS MAKE-UP, OVERFLOW,
  AND DRAIN CONNECTIONS.
- OPTIONAL FEATURES: AVAILABLE BASED ON USER NEEDS.

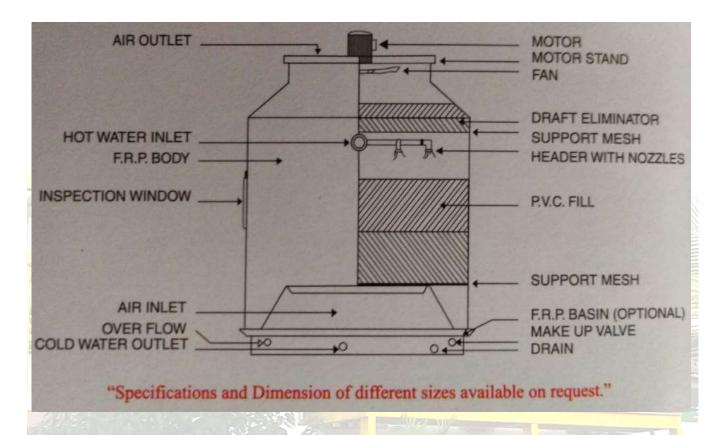






#### **CUSTOMER SUPPORT AND SERVICES**

- **CONSULTATION AND DESIGN:** Custom cooling solutions tailored to your specific needs.
- **INSTALLATION ASSISTANCE:** Expert installation and commissioning support.
- MAINTENANCE PLANS: Comprehensive service plans to ensure optimal performance.
- 24 / 7 TECHNICAL SUPPORT: Our team is always ready to assist you.



#### **APPLICATIONS**

BLUECHIP Counter Flow Cooling Towers are versatile and ideal for:

| Industrial Applications    | Commercial Applications  | Specialized Industries      |
|----------------------------|--------------------------|-----------------------------|
| Power Plants               | HVAC Systems             | Food And Beverage           |
| Petrochemical And Refining | Data Centers And IT      | Pharmaceutical And Chemical |
| Metal and Steel            | Hospitals And Healthcare | Automotive And Aerospace    |





#### **LONG TERM ASSOCIATED CUSTOMERS & CONSULTANTS**

| Aarti Industries Ltd                              | Inox Air Products Ltd                       | Alfa Laval India        |
|---|---|-------------------------|
| Deepak Nitrite Ltd                                | Coromandel International Ltd                | Lupin India Ltd         |
| Dorf Ketal India Ltd                              | Chemie Organics Ltd                         | UPL                     |
| Meghmani Organics Ltd                             | Sun Pharma Ltd                              | Zydus Lifesciences Ltd  |
| IFFCO   | Tata Steel India Ltd                        | Cipla Ltd               |
| Pidilit <mark>e</mark> India Ltd                  | Aditya Birla Group Ltd                      | Kumar Metal India       |
| Servotech India                                   | Valiant Organics Ltd                        | Anupam Rasayan Ltd      |
| Deepak Phenolics Ltd                              | Aarti Drugs Ltd                             | Aarti Surfactants Ltd   |
| Meghma <mark>ni</mark> Finechem <mark>L</mark> td | Songwon India Ltd                           | ZCL Chemicals Ltd       |
| Lub <mark>riz</mark> ol India                     | Mitsuchem Plast Ltd                         | Hindustan Monomers Ltd  |
| Hikal Ltd   | Hetero India Ltd                            | Nath Industries Ltd     |
| Institiute of Chemical Technology (ICT), Mumbai   | Associated Alcohol and Breweries Ltd (AABL) | Enmax Engineering India |
| Servotech India                                   | Piramal Glass                               | Sajjan India Ltd        |
| Kuwait Refinery                                   | Mount Meru Millers                          | Alembic Pharma          |
| Prasol Chemicals                                  | Krishna Phoschem Ltd                        | Madhya Bharat Agro Ltd  |
| Excelsource India                                 | Time Technoplast Ltd                        | Chemie Organics Ltd     |
| Indo Amines Ltd                                   | Bluejet Healthcare Ltd                      | Echjay Industries Ltd   |

| Toyo Engineering       | Shroff Engineers         | Lele Consultants  |
|------------------------|--------------------------|-------------------|
| Technophil Consultants | TKT Consultants          | Mott Mcdonald     |
| L&T Engineering        | Jacobs                   | JNCE Engineering  |
|                        | Universal MEP Projects   |                   |
| Enmax Engineering      | and Engineering Services | Ketav Consultants |
|                        | Limited (UMPESL)         |                   |
| Zeppelin               | Knexir                   | Aevitas           |





#### **SITE IMAGES**









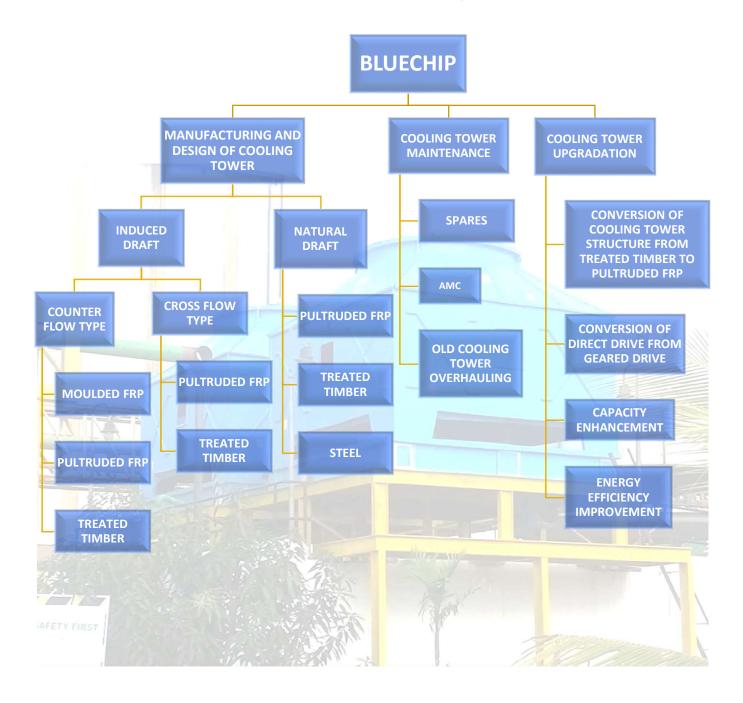








#### **BLUE CHIP INDUSTRIES OFFERINGS / PRODUCTS**







Maximize your cooling efficiency and reduce operational costs with BLUECHIP's Counter Flow Cooling Towers. Let us help you achieve unparalleled performance for your industrial and commercial cooling needs.



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