



OPEN CIRCUIT TOWER

- CROSSFLOW (BHD)
- COUNTERFLOW (BST, BND)

CLOSE CIRCUIT TOWER

- CROSSFLOW (SQBH, SQBF)
- COUNTERFLOW (SQBN)

COOLING TOWER MANUFACTURER



Know About Us

SUPER TOWER INDUSTRIES PTE LTD is established as a professional company that manufactures cooling towers in Singapore, Malaysia and China. We have been actively involved in supplying, installing, and maintaining top-quality cooling towers in South-East Asia market.

Our products are certified and registered as a Cooling Technology Institute (CTI) Member (C116A-23R00) in the U.S.A. We hold a unique position in the industry. Not only do we supply, install, and maintain Cooling Towers, but our factories in Singapore, Malaysia and China also manufacture all kinds of cooling towers, such as FRP Bottle type, Counterflow round type, Crossflow square type, special custom-made types, and other spare parts for all kinds of Cooling Towers. We also design Smart Cooling Towers to provide our customers with the best energy-efficient system without compromising the comfort of cooling in their living environments. We are proud to announce that we are able to provide 24/7 cooling tower performance with cloud-based control.

Our powerful state-of-the-art Digital Technology and Smart HVAC system seamlessly integrate into your building facilities, saving energy and manpower in operations. We are known for being energy-saving, compact, and lightweight, with reduced noise pollution. Our cooling towers are also corrosion-resistant, fire-proof, and quakeproof. We provide easy access to all kinds of Cooling Tower spare parts, such as Sprinkler heads, Sprinkler pipes, Suction Strainers, PVC infill, fan assembly, Drift eliminators, etc.

New regulations were imposed by the Environmental Protection Agency (ENV) in Singapore to control Legionnaires' Disease in all cooling towers under Chapter 95 of the act. SUPER TOWER INDUSTRIES is pleased to introduce and highlight our innovative design for supplying all makes and models of round and square Cooling Tower's Drift Eliminator based on the latest ENV Regulation.

SUPER TOWER INDUSTRIES management spirit is firmly grounded in the belief that we must offer only the highest quality services to our clients and engage in business relationships that are not only beneficial to ourselves but also to our clients. This principle has been the guiding influence on all of our business strategies and goals. As part of our commitment to leveraging cutting-edge smart technology, we are pleased to offer our clients a range of preventive and predictive measures for their on-site cooling towers. Our advanced system is designed to identify potential issues before they arise, allowing us to take proactive steps to ensure the efficient operation of your equipment and minimize the risk of unexpected downtime. With our expert team and state-of-the-art technology, you can trust us to deliver reliable and effective cooling tower solutions that meet your unique needs and exceed your expectations.

Our Mission

- ***Total Customer Satisfactoriness***
- ***Excellent Quality***
- ***Speedy Response***
- ***Price Competitiveness***
- ***Good Teamwork***
- ***Best Energy-Efficiency with 4 ticks SGBC***

Cooling Tower

A cooling tower is a distinctive type of heat exchanger that enables water and air to interact with each other to reduce the temperature of hot water. During this process, small volumes of water evaporate, lowering the temperature of the circulating water in the cooling tower. In short, a cooling tower cools down water that becomes overheated by industrial equipment.

SUPER TOWER INDUSTRIES primarily offers common induced draft cooling tower systems, which are commonly used in large office buildings, hotels, condominiums, HDBs, hospitals, shopping malls, and other industrial processes and facilities. Our available cooling tower systems are as follows:



Models

- Open Circuit Crossflow Cooling Towers
 - # BHD Series (Low Noise and Super Low Noise Square Type)
- Open Circuit Counter Flow Cooling Towers
 - # BST Series (Low Noise and Super Low Noise Square Type)
 - # BND Series (Standard Low Noise Round Type)
- Closed Circuit Crossflow Cooling Towers
 - # SQBF Series (Both Side Air Entry Square Type)
 - # SQBH Series (Single Side & Top Side Air Entry Square Type)
- Closed Circuit Counter Flow Cooling Towers
 - # SQBN Series (Both side Air Entry Square Type)

SUPER TOWER INDUSTRIES also offers custom-made cooling towers that suit your requirements, using special FRP legs instead of steel legs for square towers to prevent corrosion and lower the overall height of the cooling tower to suit your application.

have experience in offering high-quality spare parts and long-term cost-efficient services to our clients, making us one of the reliable service providers across the country.

In addition to manufacturing new cooling towers, we also provide replacement, refurbishment, and enhancement services for old towers, utilizing advanced innovation to achieve better outcomes

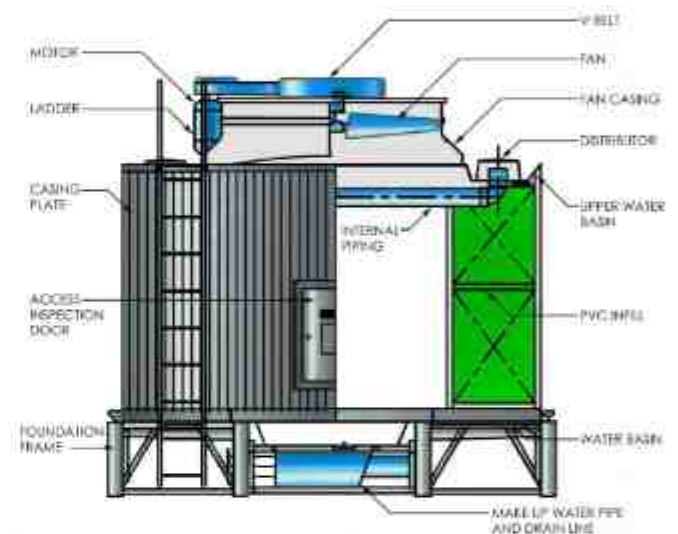
Features - Square cross-flow low & super low noise tower series

BHD Series works by circulating warm water caused via cooling condensers is tapped through the hot water distribution piping directly into the cooling tower. The upper water basin located normally on top of the vertically layered PVC infills containing with holes and nozzles (optional) at the bottom side are utilized to distribute water equally over the infills through gravity force. Outside air flows horizontally through the layered infills from both sides and perpendicular to the water flowing downward resulting a cross flow interaction of air and water in which the induced air takes out the warm vapor and cools the hot water hence the heat transfer process occurs. The warm air inside is then being pulled out by an electric motor-driven cooling tower fan. The colder water collected in the lower water basin gets pumped back to the cooling condensers and reiterates the process to constantly cool down the condensers.

Key Features

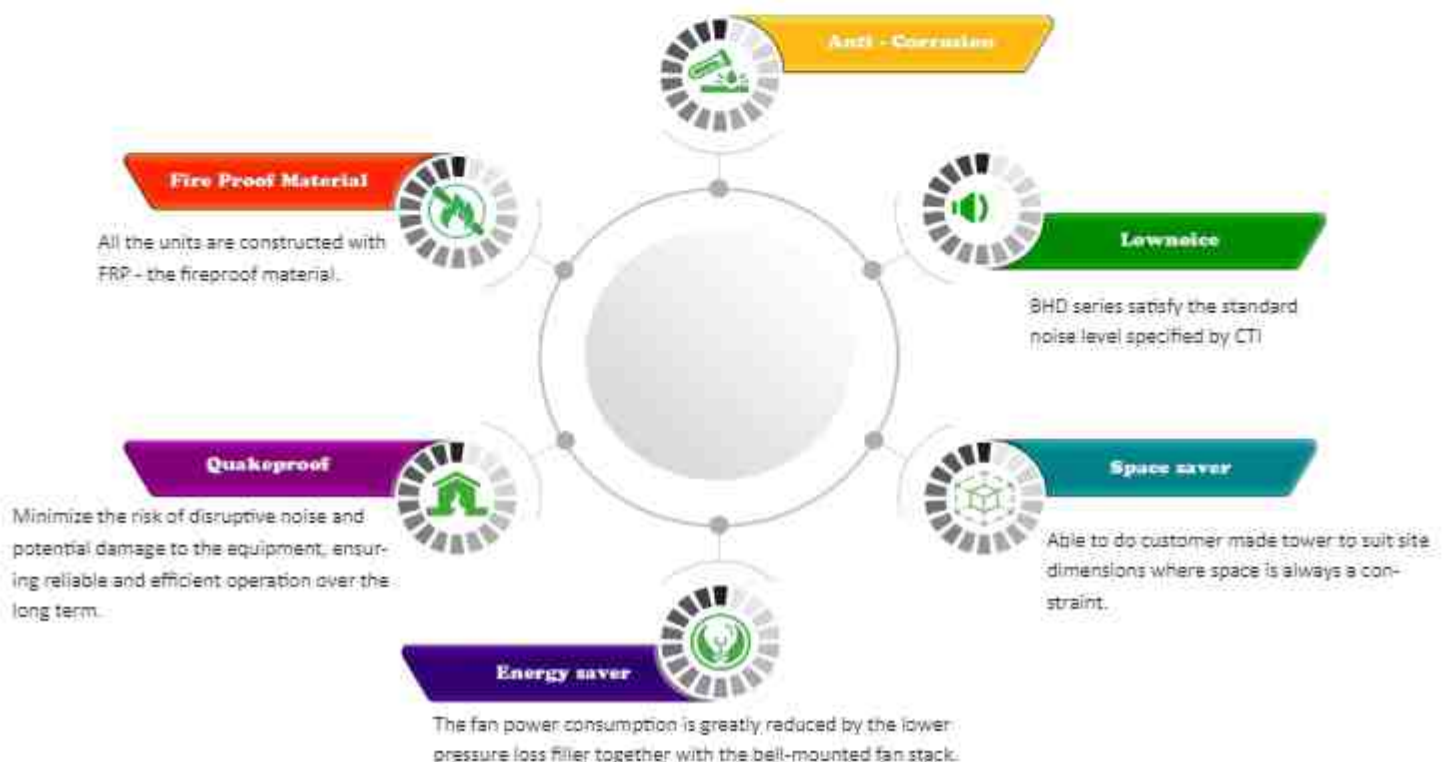
1. Certified by COOLING TECHNOLOGY INSTITUTE (C166A-23R00)
2. Leader for efficient cooling towers awarded certification from SGBC (SGBP 5094)
3. Visual inspection / Checking is easy and accessible.
4. Entire cooling tower height is lower and suitable.
5. Custom-made size choices are available for customers.
6. Flexibility to adjust the height of the CT (Cooling Tower)

Structural Model



All the main components are made of the anti-corrosive materials such as FRP and HDG steel.

Advantages



BHD Series

Square cross-flow low & super low noise series - Technical Specifications

| No. | Model | Dimensions (mm) | | | Motor | Fan Dia. | Piping Diameter mm DN x no | | | | Weight (kkg) | | dB |
|-----|-----------|-----------------|------|------|----------------------|-------------------|----------------------------|---------------------|---------------------------|------------------------|--------------|-------|----|
| | BHD-t | L | W | H | 415/50 Hz Kw x no | Ø mm x no (mm) | Inlet x no (mm) | Outlet x no (mm) | Drain Overflow (mm) | Manual Auto (mm) | Dry | Wet | |
| 1 | BHD-50t | 1200 | 2170 | 3600 | 1.5×1 | 900×1 | 80×1 | 80×1 | 40/40×1 | 20/20×1 | 0.39 | 1.09 | 54 |
| 2 | BHD-75t | 1500 | 2470 | 3600 | 2.2×1 | 1100×1 | 100×1 | 100×1 | 40/40×1 | 20/20×1 | 0.53 | 1.43 | 54 |
| 3 | BHD-85t | 1500 | 2470 | 3600 | 2.2×1 | 1200×1 | 100×1 | 100×1 | 40/40×1 | 25/25×1 | 0.58 | 1.43 | 55 |
| 4 | BHD-100t | 1500 | 2470 | 3720 | 3.0×1 | 1300×1 | 100×1 | 100×1 | 40/40×1 | 25/25×1 | 0.67 | 1.6 | 55 |
| 5 | BHD-125t | 1800 | 2770 | 4080 | 3.0×1 | 1500×1 | 125×1 | 125×1 | 40/40×1 | 25/25×1 | 0.84 | 1.8 | 55 |
| 6 | BHD-150t | 1800 | 2770 | 4080 | 4.0×1 | 1500×1 | 150×1 | 150×1 | 40/40×1 | 32/32×1 | 0.89 | 1.84 | 56 |
| 7 | BHD-175t | 1900 | 2810 | 4080 | 4.0×1 | 1600×1 | 150×1 | 150×1 | 40/40×1 | 32/32×1 | 1.01 | 2.16 | 56 |
| 8 | BHD-200t | 2310 | 3210 | 4100 | 5.5×1 | 1800×1 | 150×1 | 150×1 | 40/40×1 | 32/32×1 | 1.17 | 2.27 | 56 |
| 9 | BHD-225t | 2310 | 3110 | 4100 | 5.5×1 | 1900×1 | 150×1 | 150×1 | 40/40×1 | 32/32×1 | 1.27 | 2.37 | 57 |
| 10 | BHD-250t | 2590 | 3520 | 4250 | 5.5×1 | 2000×1 | 200×1 | 200×1 | 50/50×1 | 40/40×1 | 1.39 | 3.49 | 57 |
| 11 | BHD-275t | 2590 | 3520 | 4250 | 5.5×1 | 2100×1 | 200×1 | 200×1 | 50/50×1 | 40/40×1 | 1.49 | 3.69 | 57 |
| 12 | BHD-300t | 2700 | 4600 | 4950 | 7.5×1 | 2400×1 | 200×1 | 200×1 | 50/50×1 | 40/40×1 | 1.79 | 4.32 | 64 |
| 13 | BHD-350t | 2700 | 4600 | 5550 | 11.0×1 | 2400×1 | 200×1 | 200×1 | 50/50×1 | 40/40×1 | 2 | 4.82 | 66 |
| 14 | BHD-400t | 3100 | 5600 | 4900 | 11.0×1 | 2800×1 | 250×1 | 250×1 | 50/50×1 | 40/40×1 | 2.64 | 6.45 | 68 |
| 15 | BHD-450t | 3100 | 5600 | 5450 | 11.0×1 | 2800×1 | 250×1 | 250×1 | 80/80×1 | 50/50×1 | 2.95 | 7.26 | 68 |
| 16 | BHD-500t | 3200 | 6200 | 5450 | 15.0×1 | 3000×1 | 250×1 | 250×1 | 80/80×1 | 50/50×1 | 3.37 | 8.22 | 70 |
| 17 | BHD-600t | 3800 | 6800 | 5510 | 18.5×1 | 3400×1 | 300×1 | 300×1 | 80/80×1 | 50/50×1 | 3.51 | 8.6 | 72 |
| 18 | BHD-700t | 4000 | 7000 | 5580 | 22.0×1 | 3800×1 | 300×1 | 300×1 | 80/80×1 | 50/50×1 | 3.75 | 9.3 | 72 |
| 19 | BHD-800t | 4500 | 7500 | 5980 | 22.0×1 | 4200×1 | 300×1 | 300×1 | 80/80×1 | 50/50×1 | 4.28 | 10.5 | 74 |
| 20 | BHD-900t | 5300 | 8300 | 6300 | 22.0×1 | 5000×1 | 300×1 | 300×1 | 80/80×1 | 50/50×1 | 5.1 | 12.25 | 75 |
| 21 | BHD-1000t | 6400 | 6200 | 5450 | 15.0×2 | 3000×2 | 250×2 | 250×2 | 80/80×2 | 50/50×2 | 6.74 | 16.44 | 75 |
| 22 | BHD-1200t | 7600 | 6800 | 5510 | 18.5×2 | 3400×2 | 300×2 | 300×2 | 80/80×2 | 50/50×2 | 7.02 | 17.2 | 75 |
| 23 | BHD-1500t | 9600 | 6200 | 5450 | 15.0×3 | 3000×3 | 250×3 | 250×3 | 80/80×3 | 50/50×3 | 10.11 | 24.66 | 75 |
| 24 | BHD-1800t | 11400 | 6800 | 5510 | 18.5×3 | 3400×3 | 300×3 | 300×3 | 80/80×3 | 50/50×3 | 10.53 | 25.8 | 75 |
| 25 | BHD-2000t | 12800 | 6200 | 5450 | 15.0×4 | 3000×4 | 250×4 | 250×4 | 80/80×4 | 50/50×4 | 13.48 | 32.88 | 75 |
| 26 | BHD-2500t | 16000 | 6200 | 5510 | 15.0×5 | 3000×5 | 250×5 | 250×5 | 80/80×5 | 50/50×5 | 16.85 | 41.1 | 75 |
| 27 | BHD-3000t | 19200 | 6200 | 5450 | 15.0×6 | 3000×6 | 250×6 | 250×6 | 80/80×6 | 50/50×6 | 20.22 | 49.32 | 75 |

Design Criteria :

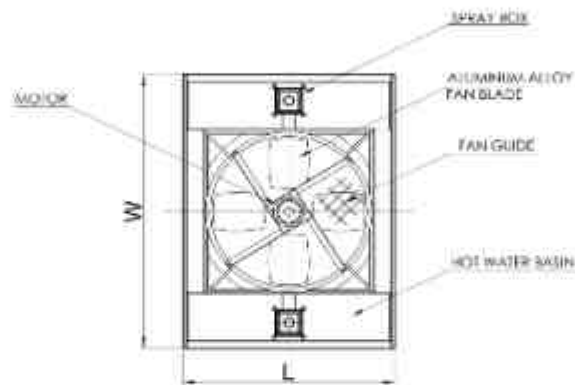
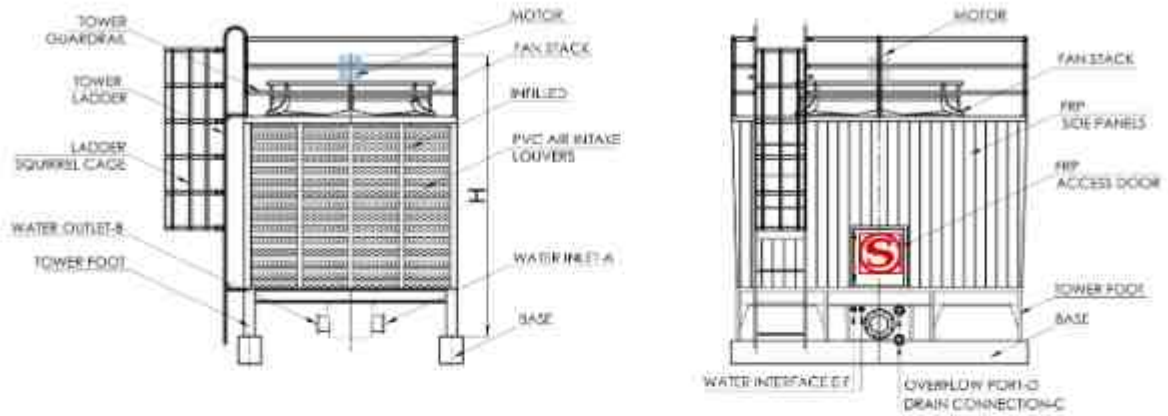
1. Noise refers to the intensity of the running sound 1.5 meters high and 16 meters away from the tower.
2. Design conditions: hot water temperature 37°C, cold water temperature 32°C, air wet bulb temperature 27°C, atmospheric pressure $1.004 \times 10^5 \text{pa}$.
3. Tower types with more circulating water can be scientifically combined according to the models in this table.
4. Due to continuous technical improvement, the technical data in the manual is subject to change.

Square cross-flow low & super low noise series - Design Selection

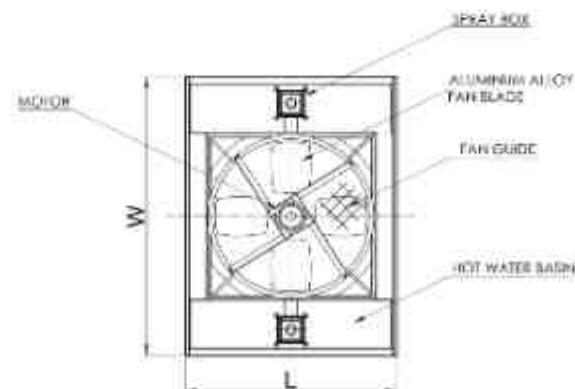
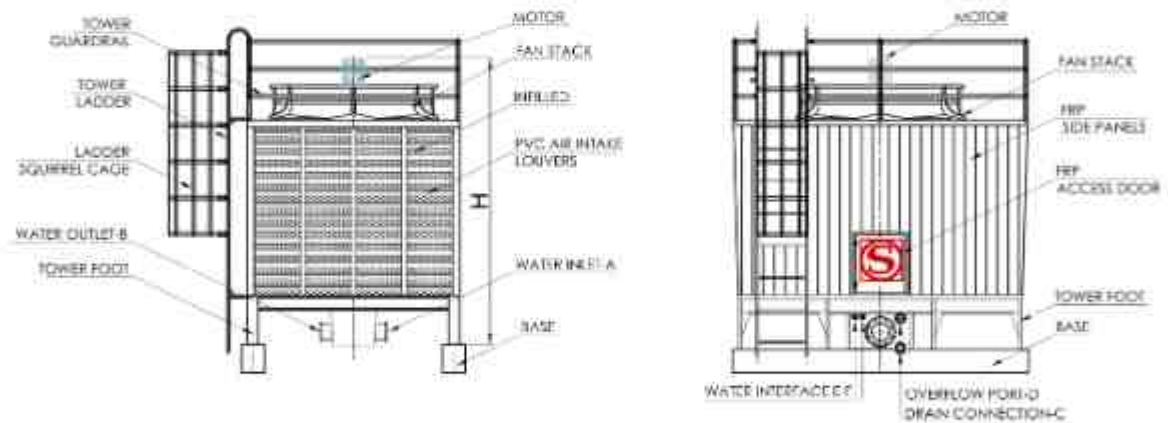
| Model | Wet bulb 27°C | | | | | | Water Flow L/s | | | | | Wet bulb 28°C | | | | | | Dimensions (mm) Form factor | | |
|-----------|---------------|-------|-------|-------|-------|-------|----------------|-------|------|-------|------|---------------|-------|-------|-------|-------|-------|--------------------------------|------|---|
| | Inlet Temp | 37 | 38 | 40 | 42 | 45 | 35 | 40 | 35 | 43 | 45 | 37 | 38 | 43 | 45 | 35 | 35 | L | W | H |
| | Outlet Temp | 32 | 32 | 32 | 32 | 32 | 30 | 30 | 29.5 | 33 | 35 | 32 | 32 | 33 | 35 | 29.5 | 30 | | | |
| BHD-50t | 13.6 | 10.4 | 6.9 | 8.1 | 7.5 | 8.1 | 8.9 | 8.9 | 9.2 | 11.6 | 10.1 | 9.1 | 8.5 | 10.8 | 9.5 | 8.6 | 1200 | 2170 | 3500 | |
| BHD-75t | 16.2 | 14.5 | 12.5 | 11.3 | 10.1 | 11.3 | 8.2 | 9.4 | 12.9 | 16.2 | 14.3 | 12.9 | 11.8 | 15.1 | 7.6 | 9.2 | 1500 | 2470 | 3450 | |
| BHD-85t | 17.4 | 15.8 | 13.4 | 12.1 | 10.8 | 12.1 | 8.7 | 10.3 | 13.8 | 17.4 | 15.4 | 13.9 | 12.6 | 16.2 | 8.1 | 9.1 | 1800 | 2470 | 3500 | |
| BHD-100t | 19.1 | 17.1 | 14.6 | 13.1 | 11.7 | 13.1 | 9.4 | 11.1 | 15 | 18.9 | 16.8 | 15.1 | 13.7 | 17.7 | 8.8 | 10.7 | 1500 | 2470 | 3500 | |
| BHD-125t | 26.2 | 23.3 | 20.1 | 17.9 | 16 | 17.9 | 13 | 15.2 | 20.4 | 23.6 | 23.1 | 20.8 | 18.7 | 24.1 | 12 | 14.6 | 1800 | 2770 | 3600 | |
| BHD-150t | 29 | 26 | 22.1 | 19.6 | 17.5 | 19.9 | 14.2 | 16.7 | 22.5 | 26.4 | 25.5 | 23 | 20.6 | 26.5 | 13.2 | 16.1 | 1800 | 2770 | 4100 | |
| BHD-175t | 32.3 | 28.9 | 24.6 | 21.8 | 19.3 | 21.9 | 15.6 | 18.5 | 24.9 | 31.5 | 28.3 | 25.5 | 22.7 | 29.1 | 14.5 | 17.8 | 1900 | 2810 | 4100 | |
| BHD-200t | 38 | 34 | 29 | 25.7 | 22.9 | 25.8 | 18.6 | 21.9 | 29.4 | 37.1 | 33.4 | 30.1 | 26.9 | 34.7 | 17.2 | 21 | 2310 | 3210 | 4800 | |
| BHD-225t | 45 | 38.4 | 32.6 | 28.6 | 25.5 | 28.1 | 20.6 | 24.6 | 33 | 41.8 | 37.7 | 33.9 | 30.1 | 39 | 19.2 | 23.6 | 2310 | 3210 | 4700 | |
| BHD-250t | 47.7 | 42.5 | 36.2 | 32 | 28.3 | 32.3 | 22.9 | 27.3 | 36.6 | 46.4 | 41.9 | 37.7 | 33.4 | 43.3 | 21.3 | 26.2 | 2590 | 3510 | 4300 | |
| BHD-275t | 50.9 | 45.4 | 38.5 | 33.9 | 30 | 34.5 | 24.3 | 28.9 | 38.3 | 49.3 | 44.6 | 40 | 35.4 | 46 | 22.6 | 27.8 | 2590 | 3510 | 4300 | |
| BHD-300t | 56 | 51.3 | 44.3 | 39.5 | 35 | 39.5 | 26.4 | 33.4 | 45 | 56.6 | 51 | 46 | 41.1 | 53.1 | 26.3 | 32.1 | 2700 | 4600 | 4000 | |
| BHD-350t | 67.7 | 60.6 | 51.7 | 45.8 | 40.8 | 45.3 | 33.1 | 39 | 52.5 | 66.2 | 59.5 | 53.7 | 48 | 60.9 | 30.7 | 37.5 | 2700 | 4600 | 4500 | |
| BHD-400t | 77.3 | 69.3 | 59.1 | 52.4 | 46.7 | 53.1 | 37.9 | 44.8 | 60 | 73.7 | 66 | 61.3 | 54.8 | 70.7 | 33.1 | 42.8 | 3100 | 3600 | 4000 | |
| BHD-450t | 87 | 77.9 | 66.5 | 58.5 | 52.5 | 59.8 | 42.6 | 50.2 | 67.5 | 85.2 | 76.5 | 69 | 61.7 | 73.6 | 39.5 | 48.2 | 3100 | 3600 | 4500 | |
| BHD-500t | 96.7 | 86.8 | 73.9 | 65.9 | 58.3 | 66.4 | 47.3 | 55.7 | 75 | 94.6 | 85 | 76.7 | 68.5 | 89.4 | 43.9 | 53.3 | 3100 | 6200 | 5000 | |
| BHD-600t | 116 | 105.9 | 88.7 | 78.6 | 70 | 79.7 | 54.8 | 64.9 | 90 | 111.6 | 102 | 91 | 81.2 | 104.1 | 52.7 | 64.2 | 3800 | 6800 | 5000 | |
| BHD-800t | 133.3 | 121.2 | 103.4 | 91.6 | 81.7 | 92.9 | 66.2 | 78 | 105 | 132.5 | 119 | 107.3 | 95.9 | 123.8 | 62.4 | 74.9 | 4000 | 7000 | 5000 | |
| BHD-900t | 154.7 | 138.5 | 118.2 | 104.7 | 93.3 | 106.2 | 75.7 | 89.2 | 120 | 151.4 | 136 | 122.7 | 109.6 | 141.5 | 70.2 | 85.6 | 4500 | 7500 | 5000 | |
| BHD-1000t | 174 | 155.8 | 133 | 117.8 | 105 | 119.5 | 85.2 | 100.3 | 135 | 170.5 | 153 | 138 | 123.3 | 159.2 | 76 | 94.3 | 5300 | 8300 | 5000 | |
| BHD-1200t | 183.3 | 173.1 | 147.8 | 130.9 | 118.7 | 132.8 | 94.8 | 111.5 | 150 | 189.3 | 170 | 153.3 | 137 | 176.9 | 83.3 | 107 | 6400 | 6200 | 5000 | |
| BHD-1500t | 232 | 207.8 | 177.3 | 157.1 | 140 | 155.3 | 113.6 | 133.3 | 180 | 227.1 | 204 | 184 | 154.4 | 212.2 | 105.3 | 128.4 | 7600 | 6800 | 5000 | |
| BHD-2000t | 290 | 259.7 | 221.7 | 196.4 | 175 | 199.2 | 141.9 | 167.2 | 225 | 283.9 | 255 | 230 | 205.6 | 263.3 | 131.7 | 160.6 | 9600 | 6200 | 5000 | |
| BHD-2500t | 348 | 311.7 | 266 | 235.7 | 210 | 259 | 170.3 | 200.7 | 270 | 340.7 | 306 | 276 | 246.7 | 318.3 | 158 | 192.7 | 11400 | 6800 | 5000 | |
| BHD-3000t | 386.7 | 346.3 | 296.6 | 261.9 | 235.3 | 265.6 | 189.3 | 223 | 300 | 378.5 | 340 | 306.7 | 274.1 | 353.7 | 175.4 | 214.1 | 12900 | 6200 | 5000 | |

BHD Series

Square cross-flow low & super low noise tower series outline drawing

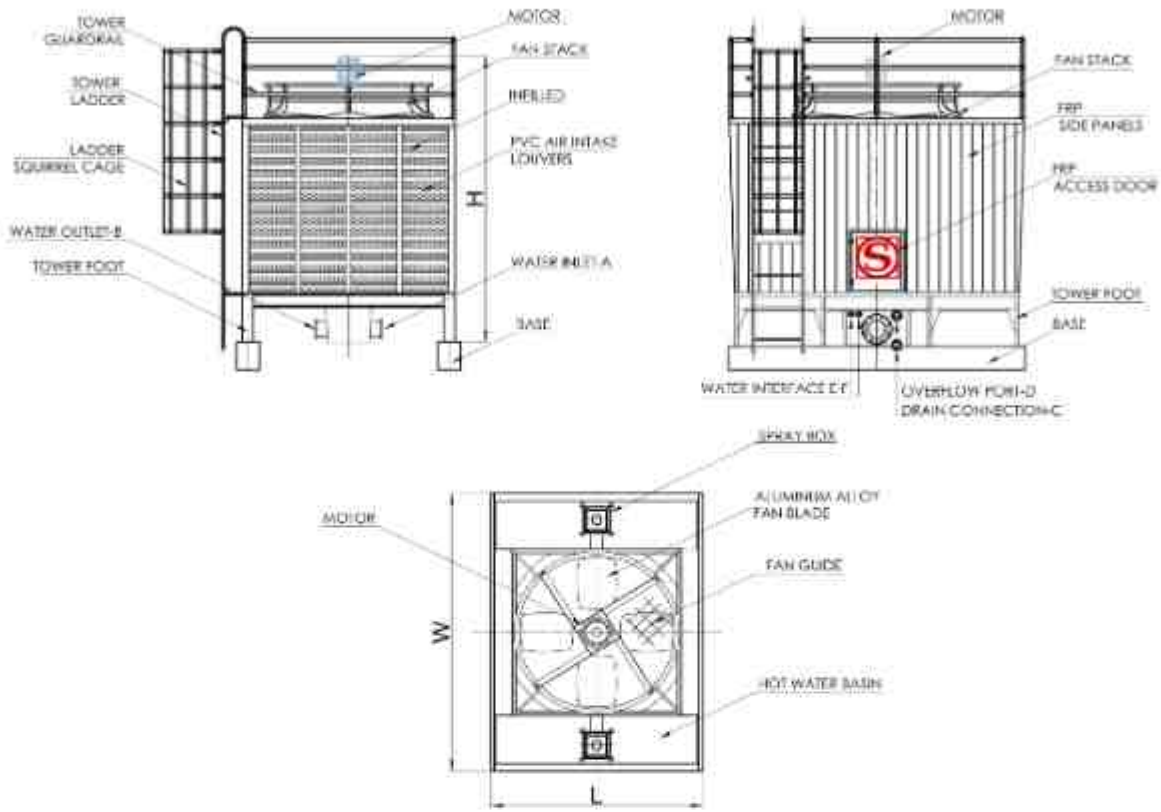


BHD-50T-100T (ONE FAN-CELL)

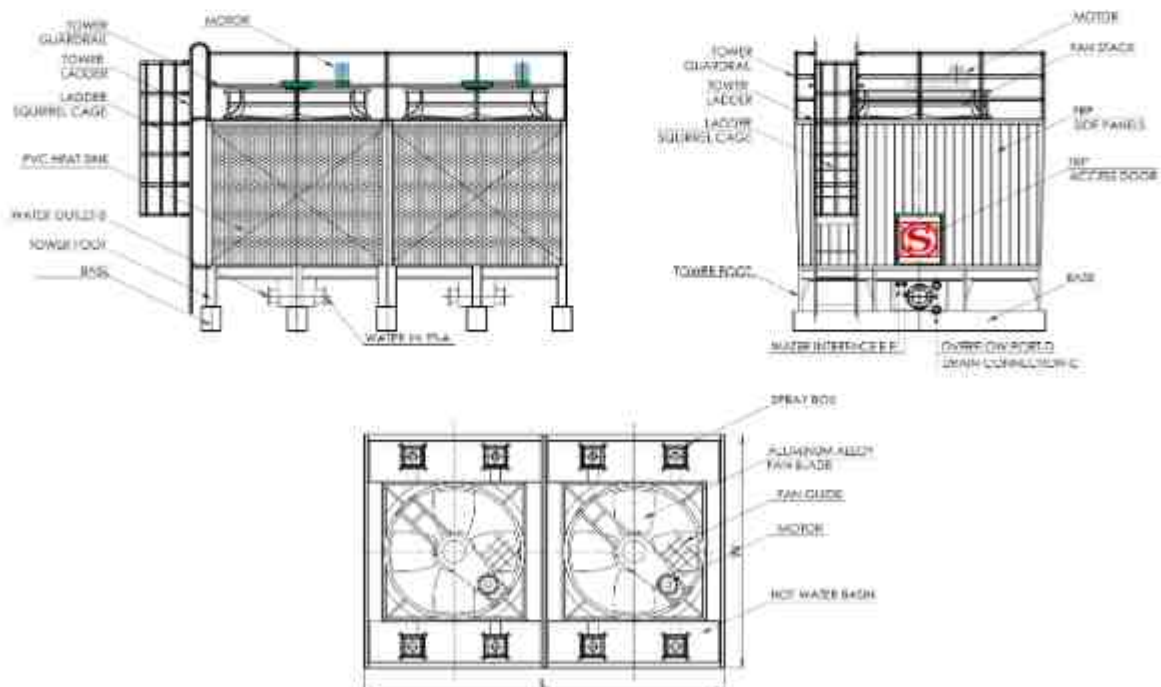


BHD-125-275T (ONE FAN-CELL)

Square cross-flow low & super low noise tower series outline drawing



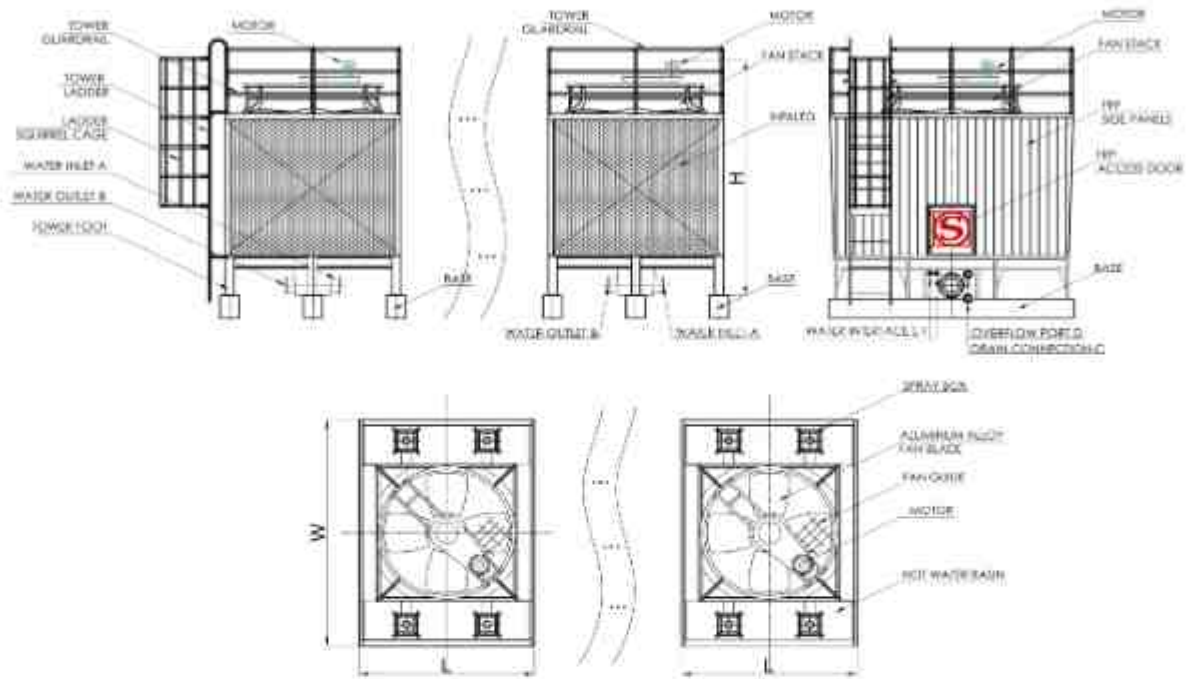
BHD-300-900T (ONE FAN-CELL)



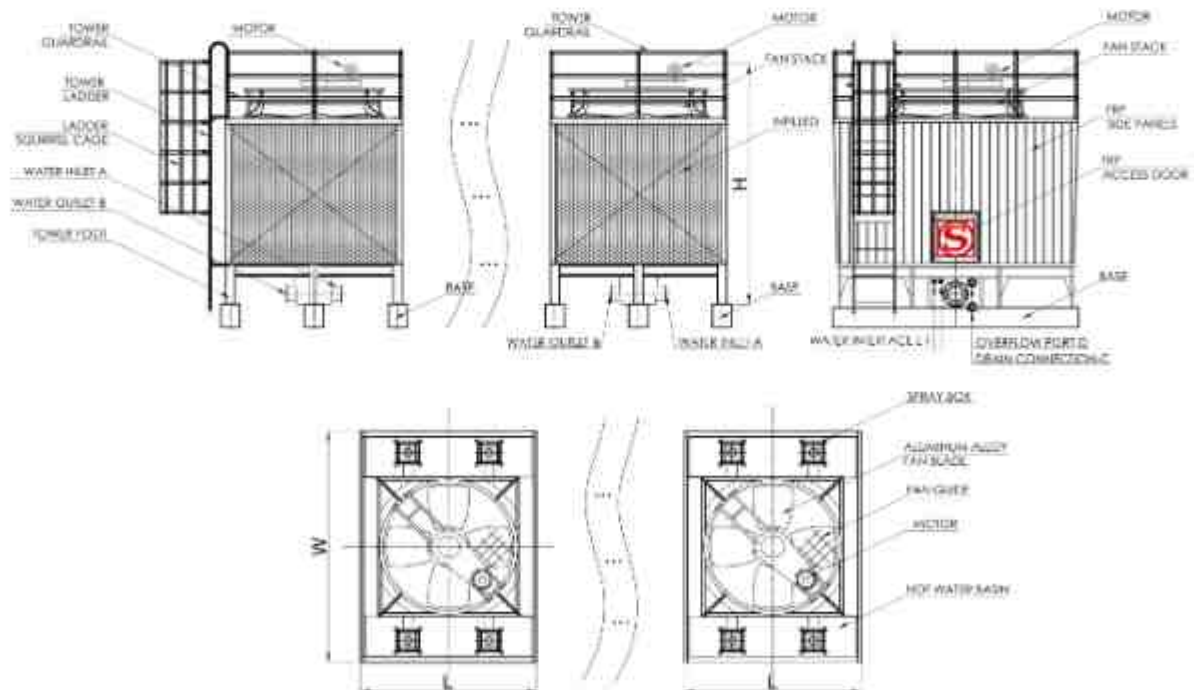
BHD-1000-1200T (TWO FAN-CELL)

BHD Series

Square cross-flow low noise tower series outline drawing

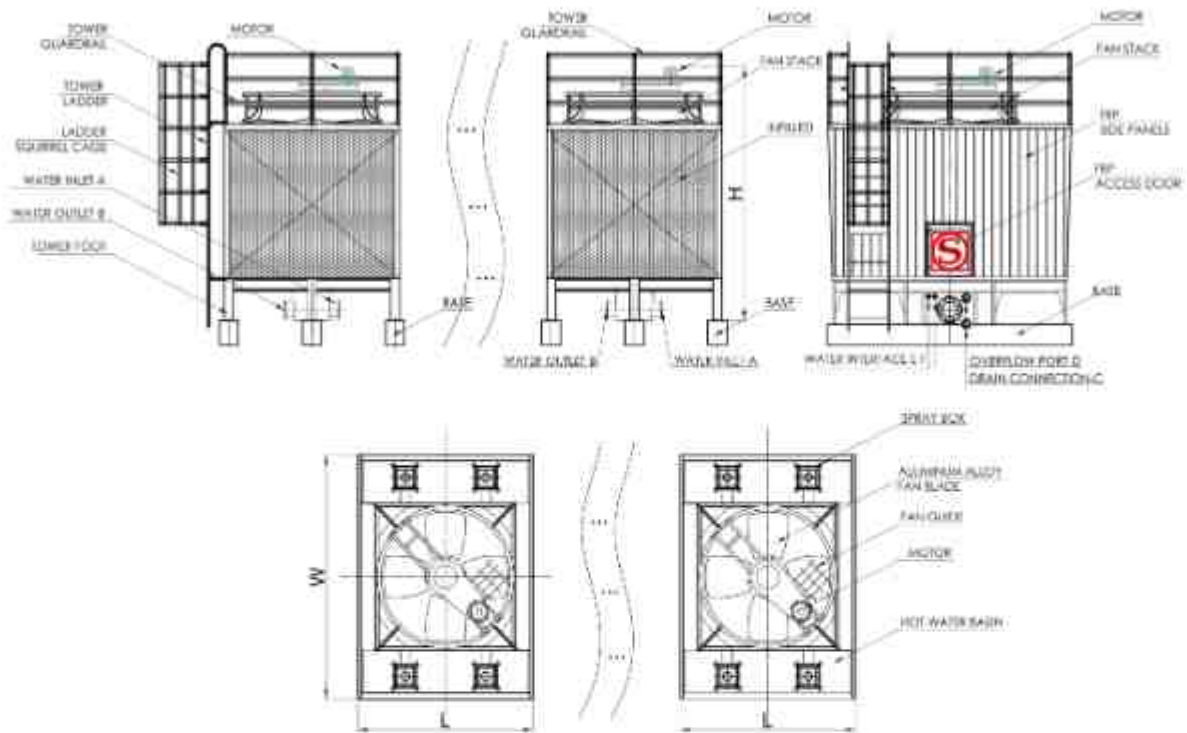


BHD-1500-1800T (THREE FAN-CELL)

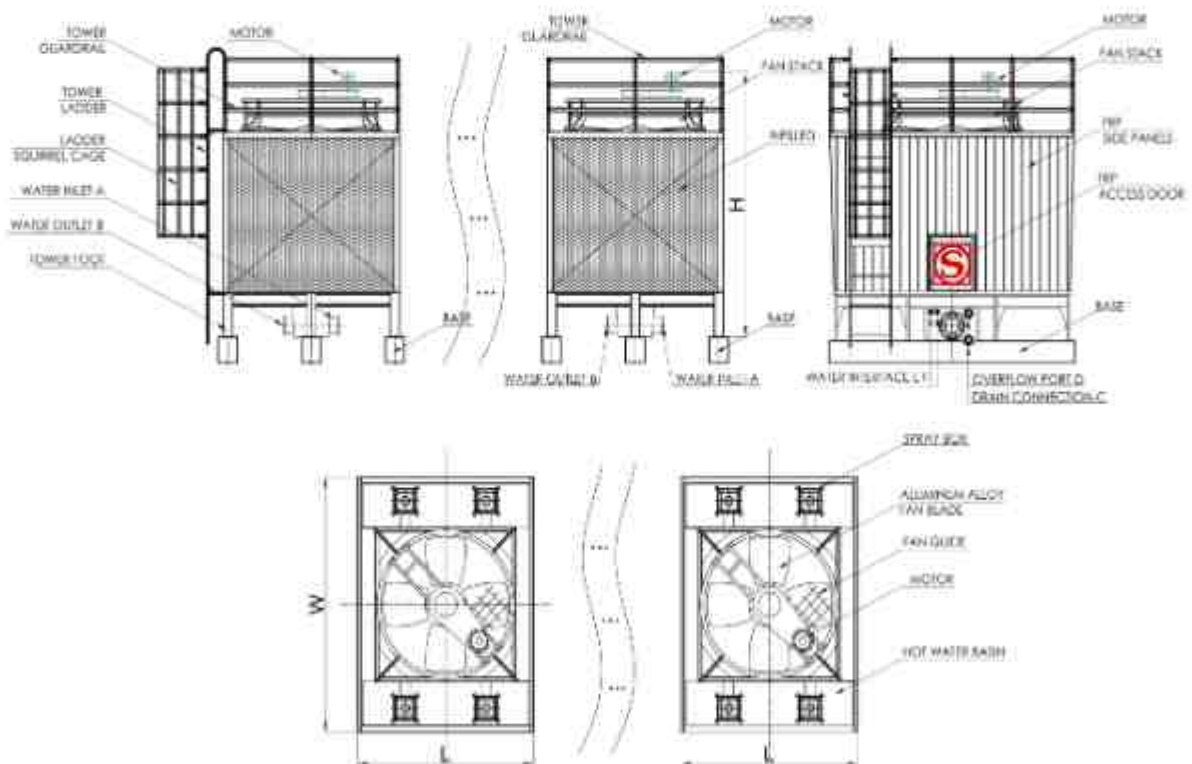


BHD-2000T (FOUR FAN-CELL)

Square cross-flow low noise tower series outline drawing



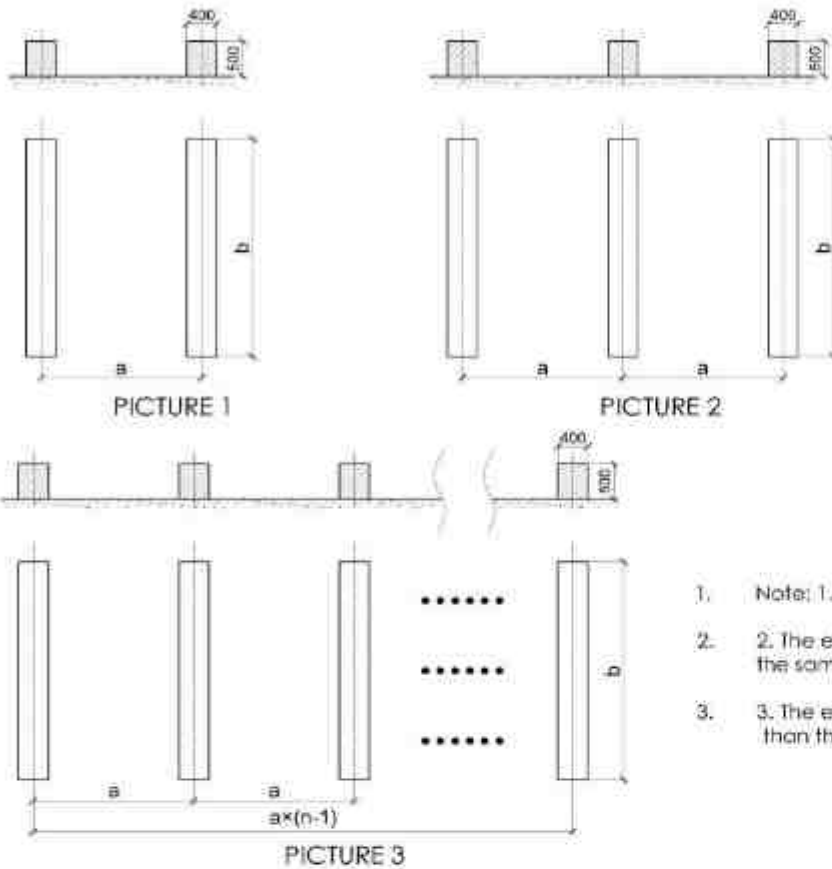
BHD-2500T (FIVE FAN-CELL)



BHD-3000T (SIX FAN-CELL)

BHD Series

Square cross-flow low noise tower series foundation drawing



1. Note: 1. The foundation is concrete foundation;
2. The elevation of the foundation surface should be on the same level, and the allowable horizontal error is $\pm 5\text{mm}$;
3. The elevation of the outlet main pipe should be lower than the elevation of the top surface of the foundation.

Foundation Specifications

| Model | Center distance <i>a</i> (mm) | length <i>b</i> (mm) | Number of base bars <i>n</i> | Figure number |
|----------|----------------------------------|-------------------------|---------------------------------|---------------|
| BHD-50t | 1200 | 2500 | 2 | picture 1 |
| BHD-75t | 1500 | 2800 | 2 | |
| BHD-85t | 1500 | 2800 | 2 | |
| BHD-100t | 1500 | 2800 | 2 | |
| BHD-125t | 1800 | 3100 | 2 | |
| BHD-150t | 1800 | 3100 | 2 | |
| BHD-175t | 1900 | 3200 | 2 | |
| BHD-200t | 2300 | 3500 | 2 | |
| BHD-225t | 2300 | 3500 | 2 | |
| BHD-250t | 2600 | 3800 | 2 | |
| BHD-275t | 2600 | 3800 | 2 | |
| BHD-300t | 2700 | 4900 | 2 | |
| BHD-350t | 2700 | 4900 | 2 | |

| Model | Center distance <i>a</i> (mm) | length <i>b</i> (mm) | Number of base bars <i>n</i> | Figure number |
|-----------|----------------------------------|-------------------------|---------------------------------|---------------|
| BHD-400t | 1550 | 5900 | 3 | picture 2 |
| BHD-450t | 1550 | 5900 | 3 | |
| BHD-500t | 1600 | 6500 | 3 | |
| BHD-600t | 1900 | 7100 | 3 | |
| BHD-700t | 2000 | 7300 | 3 | |
| BHD-800t | 2250 | 7800 | 3 | |
| BHD-900t | 2650 | 8600 | 3 | |
| BHD-1000t | 1600 | 6500 | 5 | picture 3 |
| BHD-1200t | 1900 | 7100 | 5 | |
| BHD-1500t | 1600 | 6500 | 7 | |
| BHD-1800t | 1900 | 7100 | 7 | |
| BHD-2000t | 1600 | 6500 | 9 | |
| BHD-2500t | 1600 | 6500 | 11 | |
| BHD-3000t | 1600 | 6500 | 13 | |

Smart Cooling Tower

Introducing Smart Cooling Tower :

We are proud to offer a cutting-edge solution in the world of smart cooling tower management. With advanced technology and expertise, we strive to revolutionize the way cooling towers operate, providing 24/7 individual tower capacity readiness and predictive/preventive maintenance for optimal performance.

Key Feature of Optimal Cooling Tower Performance

Monitoring & Control

Our Smart Cooling system incorporates real-time monitoring of critical parameters such as inlet temperature, outlet temperature, wet bulb temperature, and water flow rate. This comprehensive data allows us to precisely assess the cooling load of the tower. By continuously monitoring these key factors, we ensure that your cooling tower operates at peak efficiency.

Predictive & Preventive

With Smart Cooling, we take a proactive approach to maintenance. By analyzing the real-time data collected from your cooling tower, our advanced algorithms and predictive maintenance models enable us to identify maintenance needs, anticipate component failures, and schedule repairs or replacements in a timely manner. This approach significantly reduces the risk of unexpected breakdowns, extends the lifespan of your equipment, and minimizes costly emergency repairs.

Real-Time Insights

Our Smart Cooling system provides you with accurate and up-to-date insights into the performance of your cooling tower. By leveraging this information, your Facilities and Management team can make informed decisions regarding energy consumption, system optimization, and overall efficiency enhancements. This empowers you to optimize resource allocation, reduce energy costs, and improve the sustainability of your cooling operations.

Integration & Customization

We understand that every facility has unique requirements. That's why our Smart Cooling solution is designed to seamlessly integrate with your existing cooling tower infrastructure. Whether you have a single cooling tower or a complex network of towers, our system can be tailored to meet your specific needs. We work closely with your team to ensure a smooth implementation process, minimal disruption, and maximum benefits.

We believe that Smart Cooling is the future of cooling tower management. With our advanced technology, real-time monitoring capabilities, and proactive maintenance approach, we empower you to achieve optimal performance, energy efficiency, and peace of mind. Experience the difference that Smart Cooling can make for your facility.



Contact us today to learn more about our Smart Cooling solution and how it can transform your cooling tower operations. Let us help you take control of your cooling system like never before.

BST Series

Features - Square counter-flow low and super low noise series

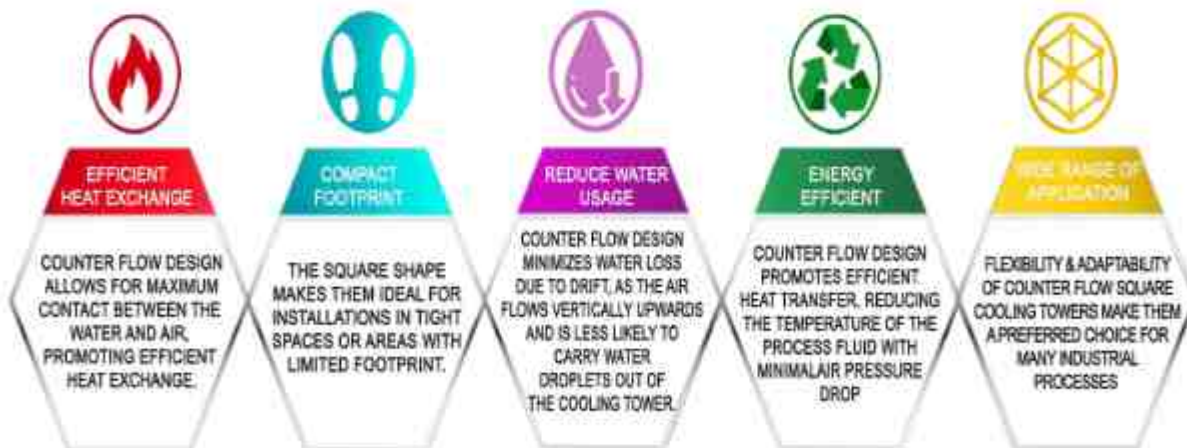
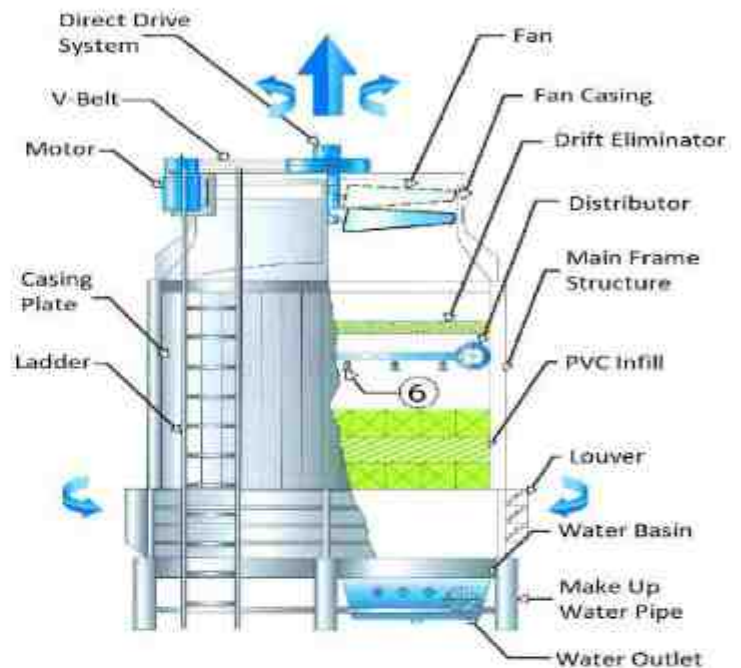
Counter flow square cooling towers are designed with an open-circuit configuration, where the air flows vertically upwards while the water flows downward. This counter flow design allows for efficient heat transfer and offers several advantages compared to other types of cooling towers.

Key Features

1. High performance can be achieved because of maximum contact between the water and air.
2. Visual inspection / Checking of the foreign matter is easy and accessible.
3. Inspection door installed for quick access inside the structure.
4. Space efficient and allows easy installation in tight spaces

Advantages

Structural Model



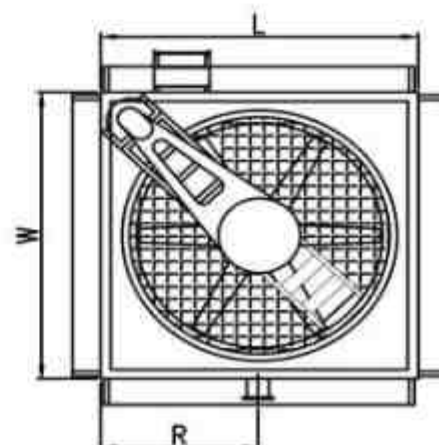
Square counter-flow low & super low noise series - Technical Specifications (I)

| Model | | | BST-100 | BST-125 | BST-150 | BST-175 | BST-200 | BST-225 | BST-250 | BST-275 | BST-300 | BST-350 | |
|---------------------|----------------------------|---|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|
| Capacity | Cooling Capacity | HRT | 100 | 125 | 150 | 175 | 200 | 225 | 250 | 275 | 300 | 350 | |
| | Water Flowrate | L/min | 1300 | 1625 | 1950 | 2275 | 2600 | 2925 | 3250 | 3575 | 3900 | 4550 | |
| Dimension | Width (W) | mm | 2150 | 2150 | 2750 | 2750 | 2750 | 3150 | 3150 | 3350 | 3350 | 3550 | |
| | Length (L) | mm | 2150 | 2150 | 2750 | 2750 | 2750 | 3150 | 3150 | 3350 | 3350 | 3550 | |
| | Height (H) | mm | 3790 | 3790 | 4100 | 4100 | 4100 | 4910 | 4910 | 5210 | 5210 | 5210 | |
| | Louver Hight, LV | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 1200 | 1200 | 1200 | |
| Material | Steel Structure | Hot Dip Galvanized Steel | | | | | | | | | | | |
| | Casing | FRP | | | | | | | | | | | |
| | Filling | PVC | | | | | | | | | | | |
| | Drift Eliminator | PVC | | | | | | | | | | | |
| | Distribution Pipe / Nozzle | PVC / Polypropylene | | | | | | | | | | | |
| | Cold Water Basin | FRP | | | | | | | | | | | |
| | Fan Stack | FRP | | | | | | | | | | | |
| | Fan | Fan Blade : Aluminum Extruded ; Hub : Aluminum Cast Alloy | | | | | | | | | | | |
| Type | Axial Flow | | | | | | | | | | | | |
| Fan Assembly | Fan | Diameter | mm | 1700 | 1700 | 2000 | 2000 | 2000 | 2200 | 2200 | 2800 | 2800 | 3050 |
| | | Number of blade | 4 - 6 | | | | | | | | | | |
| | | Fan Speed | RPM | 480 | 480 | 480 | 480 | 480 | 420 | 420 | 380 | 380 | 360 |
| | Motor | Drive System | V-belt drive (Optional Gear Reducer) | | | | | | | | | | |
| | | Type | Total Enclosed Fan - Cooled Outdoor 3 Phase Induction Motor 4 - Pole | | | | | | | | | | |
| | | Power Source | 3 Phase 415V 50 Hz | | | | | | | | | | |
| Rated Output | kw | 3.7 | 5.5 | 3.7 | 3.5 | 7.5 | 5.5 | 7.5 | 5.5 | 7.5 | 11 | | |
| Distribution System | | | PVC Distribution Pipe C/W Polypropylene Spray Nozzle | | | | | | | | | | |
| Piping Details | Return Pipe Hight, P | mm | 2560 | 2572 | 2772 | 2785 | 2785 | 3120 | 3120 | 3520 | 3520 | 3530 | |
| | Hot Water Inlet | mm | 100 x 1 | 125 x 1 | 125 x 1 | 150 x 1 | 150 x 1 | 200 x 1 | 200 x 1 | 200 x 1 | 200 x 1 | 200 x 1 | |
| | Cold Water Outlet | mm | 100 x 1 | 125 x 1 | 125 x 1 | 150 x 1 | 150 x 1 | 200 x 1 | 200 x 1 | 200 x 1 | 200 x 1 | 200 x 1 | |
| | Drain Pipe | mm | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | |
| | Over Flow | mm | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | 50 x 1 | |
| | Auto Make-up | mm | 25 x 1 | 25 x 1 | 35 x 1 | 25 x 1 | 25 x 1 | 32 x 1 | 32 x 1 | 40 x 1 | 40 x 1 | 40 x 1 | |
| | Manual Make-up | mm | 25 x 1 | 35 x 1 | 25 x 1 | 25 x 1 | 25 x 1 | 32 x 1 | 32 x 1 | 40 x 1 | 40 x 1 | 40 x 1 | |
| Make up | Evaporation Loss | % | 0.04 | | | | | | | | | | |
| | Drift Loss | % | 0.005 | | | | | | | | | | |
| Weigth | Dry | kg | 1060 | 1090 | 1560 | 1590 | 1680 | 2080 | 2150 | 2550 | 2750 | 2950 | |
| | Operation | kg | 2900 | 2950 | 3850 | 3990 | 4350 | 4880 | 4950 | 5680 | 5880 | 6100 | |

Note:

- Normal Cooling Tower capacity is based on 13L/min / RT
(1 RT = 3,900 Kcal/hr)
Water inlet 37 °C
Water outlet 32 °C
Wet Bulb 27 °C
- Manufacturer reserve the right to make change in the specification and dimensions without notice.

Top View - BST Single Cell Tower



BST Series

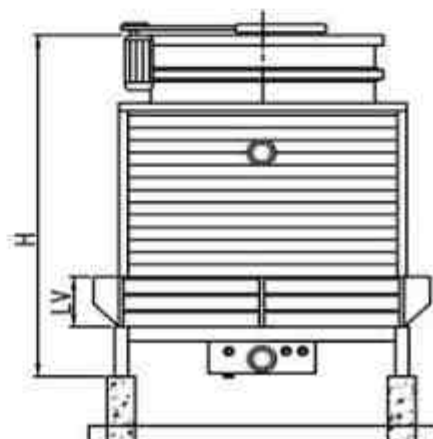
Square counter-flow low & super low noise series - Technical Specifications (II)

| Model | | | BST-400 | BST-450 | BST-500 | BST-600 | BST-700 | BST-800 | BST-900 | BST-1000 | BST-1250 | BST-1500 | |
|---------------------|----------------------------|---|--|---------|---------|---------|---------|---------|---------|----------|----------|----------|------|
| Capacity | Cooling Capacity | HRT | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1250 | 1500 | |
| | Water Flowrate | L/min | 5200 | 5850 | 6500 | 7800 | 9100 | 10400 | 11700 | 13000 | 16250 | 19500 | |
| Dimension | Width (W) | mm | 3950 | 3950 | 4350 | 5100 | 5400 | 5700 | 6600 | 7100 | 7600 | 7600 | |
| | Length (L) | mm | 3950 | 3950 | 4350 | 5100 | 5400 | 5700 | 6600 | 7100 | 7600 | 7600 | |
| | Height (H) | mm | 5520 | 5520 | 5820 | 5820 | 6130 | 6130 | 6130 | 6430 | 6740 | 6740 | |
| | Louver Height, LV | mm | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | |
| Material | Steel Structure | Hot Dip Galvanized Steel | | | | | | | | | | | |
| | Casing | FRP | | | | | | | | | | | |
| | Filling | PVC | | | | | | | | | | | |
| | Drift Eliminator | PVC | | | | | | | | | | | |
| | Distribution Pipe / Nozzle | PVC / Polypropelene | | | | | | | | | | | |
| | Cold Water Basin | FRP | | | | | | | | | | | |
| | Fan Stack | FRP | | | | | | | | | | | |
| | Fan | Fan Blade : Aluminum Extruded ; Hub : Aluminum Cast Alloy | | | | | | | | | | | |
| Fan Assembly | Fan | Type | Axial Flow | | | | | | | | | | |
| | | Diameter | mm | 3050 | 3050 | 3050 | 3650 | 3650 | 3650 | 4250 | 4250 | 4250 | 4250 |
| | | Number of blade | 4 - 6 | | | | | | | | | | |
| | | Fan Speed | RPM | 360 | 360 | 360 | 320 | 320 | 320 | 260 | 230 | 230 | 230 |
| | Motor | Drive System | V-belt drive (Optional Gear Reducer) | | | | | | | | | | |
| | | Type | Total Enclosed Fan - Cooled Outdoor 3 Phase Induction Motor 4 - Pole | | | | | | | | | | |
| | | Power Source | 3 Phase 415V 50 Hz | | | | | | | | | | |
| | | Rated Output | kw | 11 | 15 | | | 18.5 | 22 | | 30 | 37 | 55 |
| Distribution System | | | PVC Distribution Pipe C/W Polypropylene Spray Nozzle | | | | | | | | | | |
| Piping Details | Return Pipe Hight, P | mm | 3830 | 3830 | 3855 | 3855 | 3855 | 3880 | 3880 | 3880 | 3905 | 3905 | |
| | Hot Water Inlet | mm | 200 x1 | 200 x1 | 250 x1 | 250 x1 | 250 x1 | 300 x1 | 300 x1 | 300 x1 | 350 x1 | 350 x1 | |
| | Cold Water Outlet | mm | 200 x1 | 200 x1 | 250 x1 | 250 x1 | 250 x1 | 300 x1 | 300 x1 | 300 x1 | 350 x1 | 350 x1 | |
| | Drain Pipe | mm | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | |
| | Over Flow | mm | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 80 x1 | 80 x1 | 80 x1 | 80 x1 | 80 x1 | |
| | Auto Make-up | mm | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | |
| | Manual Make-up | mm | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | 50 x1 | |
| Make up | Evaporation Loss | % | 0.84 | | | | | | | | | | |
| | Drift Loss | % | 0.005 | | | | | | | | | | |
| Weigth | Dry | kg | 2950 | 3120 | 3890 | 5800 | 6950 | 9500 | 11800 | 13610 | 15200 | 15400 | |
| | Operation | kg | 6680 | 7130 | 8700 | 13800 | 16530 | 21050 | 26900 | 31200 | 37800 | 39600 | |

Note:

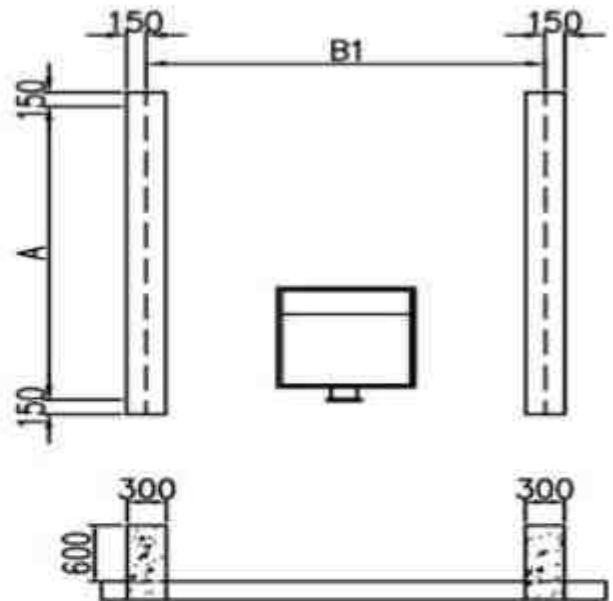
- Normal Cooling Tower capacity is based on 13L/min / RT (1 RT = 3,900 Kcal/hr)
 Water inlet 37 °C
 Water outlet 32 °C
 Wet Bulb 27 °C
- Manufacturer reserve the right to make change in the specification and dimensions without notice.

Side View - BST Single Cell Tower



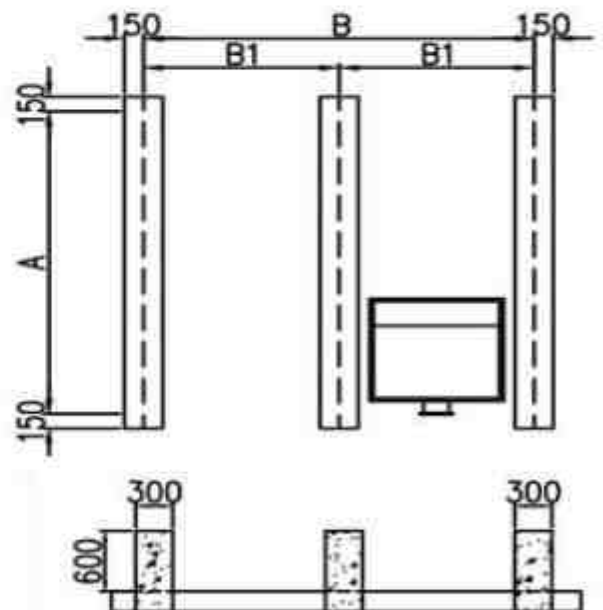
Square counter-flow low & super low noise series - Drawing (Single Cell)

| Model | Tower Dimension | | | Plinth Dimension | | |
|---------|-----------------|------|------|------------------|------|------|
| | W | L | H | A | B | B1 |
| BST-100 | 2150 | 2150 | 3790 | 2200 | 2150 | 2150 |
| BST-125 | 2150 | 2150 | 3790 | 2200 | 2150 | 2150 |



BST- 100t - 125t

| Model | Tower Dimension | | | Plinth Dimension | | |
|---------|-----------------|------|------|------------------|------|------|
| | W | L | H | A | B | B1 |
| BST-150 | 2750 | 2750 | 4100 | 2800 | 2750 | 1375 |
| BST-175 | 2750 | 2750 | 4100 | 2800 | 2750 | 1375 |
| BST-200 | 2750 | 2750 | 4100 | 2800 | 2750 | 1375 |
| BST-225 | 3150 | 3150 | 4910 | 3200 | 3150 | 1575 |
| BST-250 | 3150 | 3150 | 4910 | 3200 | 3150 | 1575 |
| BST-275 | 3350 | 3350 | 5210 | 3400 | 3350 | 1675 |
| BST-300 | 3350 | 3350 | 5210 | 3400 | 3350 | 1675 |
| BST-350 | 3550 | 3550 | 5210 | 3600 | 3550 | 1775 |
| BST-400 | 3950 | 3950 | 5520 | 4000 | 3950 | 1975 |
| BST-450 | 3950 | 3950 | 5520 | 4000 | 3950 | 1975 |
| BST-500 | 4350 | 4350 | 5820 | 4400 | 4350 | 2175 |

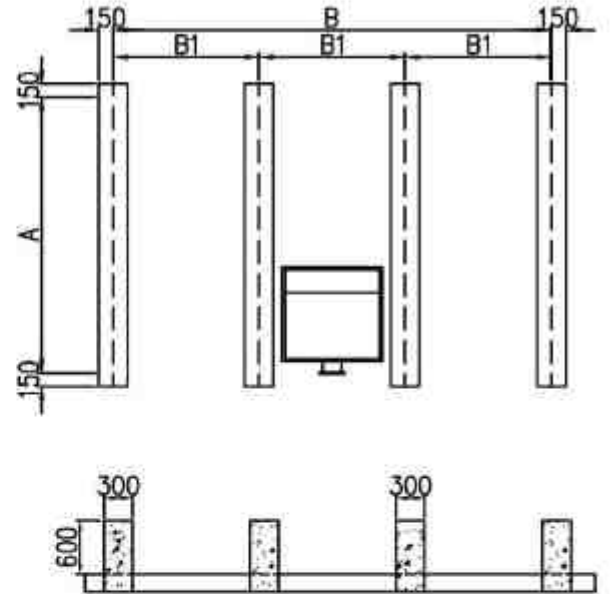


BST- 150t - 500t

BST Series

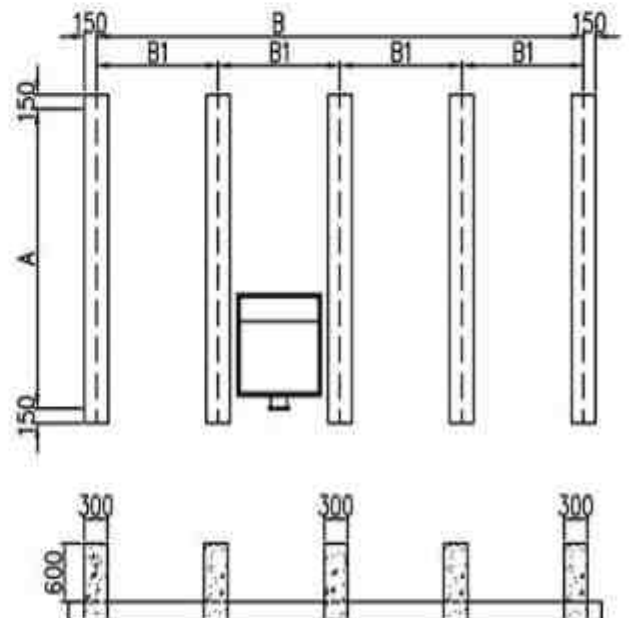
Square counter-flow low & super low noise series - Drawing (Single Cell)

| Model | Tower Dimension | | | Plinth Dimension | | |
|---------|-----------------|------|------|------------------|------|------|
| | W | L | H | A | B | B1 |
| BST-600 | 5100 | 5100 | 5820 | 5150 | 5100 | 1700 |
| BST-700 | 5400 | 5400 | 6130 | 5450 | 5400 | 1800 |
| BST-800 | 5700 | 5700 | 6130 | 5750 | 5700 | 1900 |
| BST-900 | 6600 | 6600 | 6130 | 6650 | 6600 | 2200 |



BST- 600t - 900t

| Model | Tower Dimension | | | Plinth Dimension | | |
|----------|-----------------|------|------|------------------|------|------|
| | W | L | H | A | B | B1 |
| BST-1000 | 7100 | 7100 | 6430 | 7150 | 7100 | 1775 |
| BST-1250 | 7600 | 7600 | 6740 | 7650 | 7600 | 1900 |
| BST-1500 | 7600 | 7600 | 6740 | 7650 | 7600 | 1900 |



BST- 1000t - 1500t

Features - Round counter-flow standard low noise series

Counter flow round cooling towers is a type of heat exchange equipment used in industrial processes to cool water by dissipating excess heat into the atmosphere. It typically consists of a large, circular structure with vertically oriented heat exchange elements, such as fill media, and a fan or fans located at the top. Water to be cooled is pumped to the top of the tower and distributed evenly over the fill media. As the water flows downward, it is exposed to air blown in by the fan, which causes evaporation and draws heat from the water, lowering its temperature. Simultaneously, the fan creates a counterflow of air against the descending water, enhancing the cooling process. The cooled water collects at the bottom of the tower and is then recirculated back into the system for reuse. Round counterflow cooling towers are known for their efficiency, as the counterflow design maximizes the contact between the water and air, resulting in effective heat transfer and energy savings.

Key Features

1. Removal / Cleaning / maintenance is easy and accessible.
2. Visual inspection / Checking is easy and accessible.
3. Lower initial and long-term cost due to pump requirements.

Advantages

Structural Model



BND Series

Round counter-flow low noise series - Technical Specifications

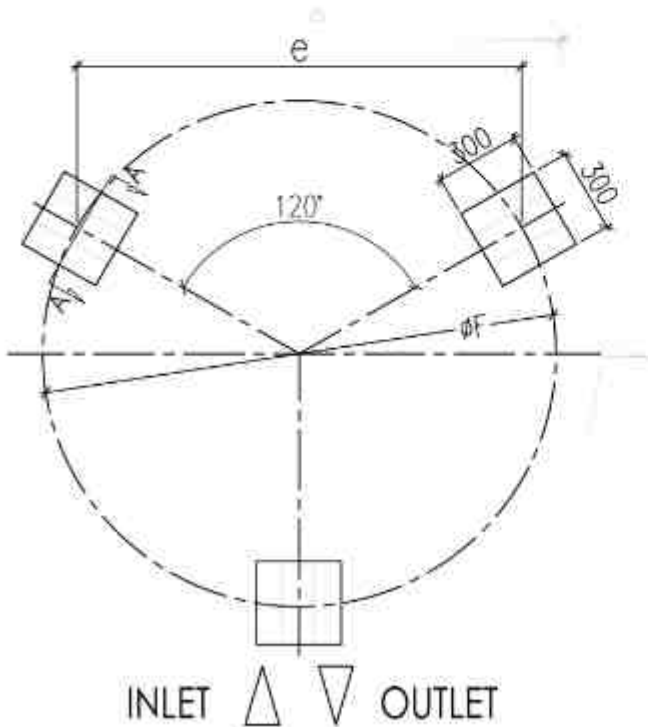
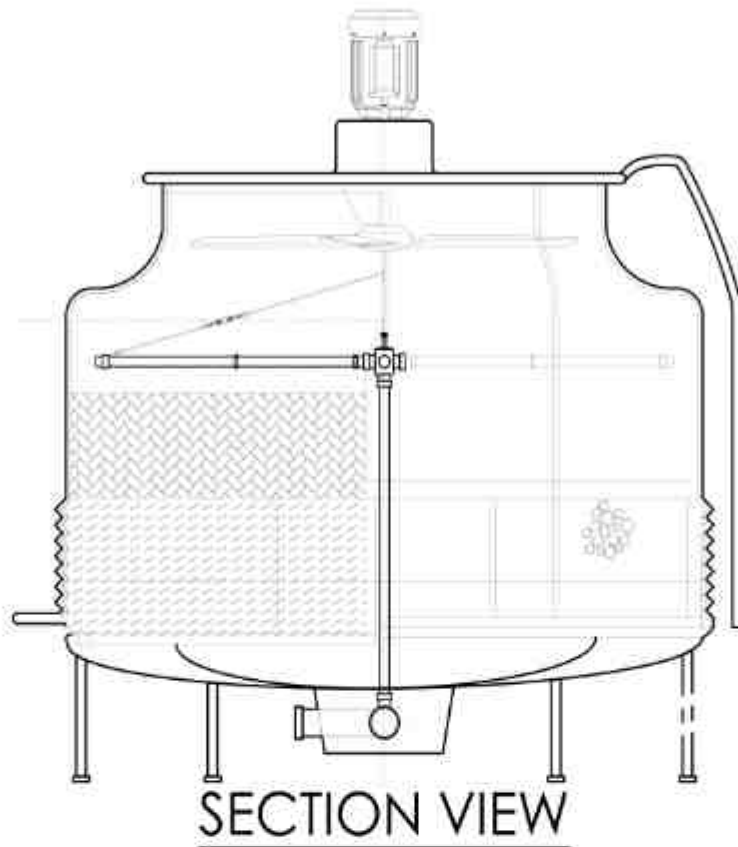
| No. | Model | MoTor | Dimensions (mm) | | Fan Diameter mm Ø | Fan Air Flow cmm | Tower Weight | | Water Pressure Kpa | Piping Diameter | | | | | Foundation | | | dB |
|-----|-----------|-------------|-----------------|------------|-------------------|------------------|--------------|---------|--------------------|-----------------|-------------|---------|-----------|-------|---------------|---------------|-------|----|
| | BND-t | 415/50 H.P. | Casing Dmm Ø | High Hmm Ø | | | Dry Kg | Wet Kkg | | Inlet Pipe | Outlet Pipe | Make Up | Over Flow | Drain | Dimension emm | Diameter mm Ø | NOS n | |
| | | | | | | | | | | | | | | | | | | |
| 1 | BND-5t | 0.25 | 720 | 1730 | 550 | 41 | 50 | 0.2 | 20 | 40 | 40 | 15 | 25 | 25 | 433 | 500 | 3 | 55 |
| 2 | BND-10t | 0.5 | 1020 | 1700 | 570 | 67 | 70 | 0.4 | 20 | 40 | 40 | 15 | 25 | 25 | 563 | 650 | 3 | 55 |
| 3 | BND-15t | 0.75 | 1020 | 1800 | 580 | 83 | 80 | 0.4 | 20 | 40 | 40 | 15 | 25 | 25 | 563 | 650 | 3 | 55 |
| 4 | BND-20t | 0.75 | 1300 | 1860 | 700 | 115 | 110 | 0.6 | 25 | 50 | 50 | 20 | 25 | 25 | 797 | 920 | 3 | 56 |
| 5 | BND-30t | 1.5 | 1300 | 1980 | 760 | 167 | 120 | 0.6 | 25 | 50 | 50 | 20 | 25 | 25 | 797 | 920 | 3 | 56 |
| 6 | BND-40t | 1.5 | 1500 | 2040 | 930 | 250 | 160 | 1.2 | 25 | 50 | 50 | 20 | 25 | 25 | 799 | 1130 | 5 | 57 |
| 7 | BND-50t | 1.5 | 1760 | 2320 | 870 | 330 | 185 | 1.2 | 25 | 80 | 80 | 20 | 25 | 25 | 990 | 1400 | 5 | 57 |
| 8 | BND-60t | 1.5 | 1760 | 2300 | 880 | 370 | 190 | 1.2 | 25 | 80 | 80 | 20 | 25 | 25 | 990 | 1400 | 5 | 57 |
| 9 | BND-75t | 2 | 2020 | 2400 | 1200 | 410 | 360 | 1.7 | 30 | 80 | 80 | 20 | 40 | 40 | 1216 | 1720 | 5 | 58 |
| 10 | BND-100t | 3 | 2620 | 2650 | 1490 | 625 | 560 | 2.1 | 30 | 100 | 100 | 25 | 40 | 40 | 1030 | 2060 | 7 | 60 |
| 11 | BND-125t | 3 | 2620 | 2700 | 1580 | 670 | 570 | 2.2 | 30 | 100 | 100 | 25 | 40 | 40 | 1030 | 2060 | 7 | 60 |
| 12 | BND-150t | 4 | 3040 | 3200 | 1800 | 830 | 870 | 3.1 | 40 | 125 | 125 | 25 | 50 | 50 | 1350 | 2700 | 7 | 61 |
| 13 | BND-175t | 5.5 | 3500 | 3300 | 1900 | 1040 | 1170 | 3.7 | 40 | 125 | 125 | 40 | 50 | 50 | 1125 | 2940 | 9 | 61 |
| 14 | BND-200t | 5.5 | 3500 | 3400 | 1990 | 1250 | 1590 | 4 | 40 | 150 | 150 | 40 | 50 | 50 | 1125 | 2940 | 9 | 62 |
| 15 | BND-225t | 5.5 | 3500 | 3400 | 2000 | 1330 | 1600 | 4.1 | 40 | 150 | 150 | 40 | 50 | 50 | 1125 | 2940 | 9 | 62 |
| 16 | BND-250t | 7.5 | 3500 | 3500 | 2100 | 1460 | 1700 | 4.5 | 40 | 150 | 150 | 40 | 50 | 50 | 1125 | 2940 | 9 | 62 |
| 17 | BND-275t | 7.5 | 4000 | 3800 | 2380 | 1670 | 2000 | 5.4 | 50 | 200 | 200 | 40 | 50 | 50 | 1335 | 3490 | 9 | 63 |
| 18 | BND-300t | 7.5 | 4000 | 3800 | 2400 | 1830 | 2100 | 5.5 | 50 | 200 | 200 | 40 | 50 | 50 | 1335 | 3490 | 9 | 63 |
| 19 | BND-350 | 7.5 | 4000 | 3900 | 2800 | 2080 | 2500 | 5.8 | 50 | 200 | 200 | 40 | 50 | 50 | 1335 | 3490 | 9 | 63 |
| 20 | BND-400t | 10 | 4900 | 3890 | 3390 | 2500 | 2900 | 7.6 | 50 | 250 | 250 | 50 | 80 | 80 | 1206 | 4660 | 13 | 64 |
| 21 | BND-450t | 10 | 4900 | 3900 | 3400 | 2670 | 3000 | 7.8 | 50 | 250 | 250 | 50 | 80 | 80 | 1206 | 4660 | 13 | 64 |
| 22 | BND-500t | 15 | 4900 | 4200 | 3600 | 2900 | 3100 | 8.3 | 50 | 250 | 250 | 50 | 80 | 80 | 1206 | 4660 | 13 | 64 |
| 23 | BND-600t | 20 | 5540 | 4400 | 4200 | 3300 | 4000 | 11.5 | 55 | 250 | 250 | 50 | 80 | 80 | 1385 | 5350 | 13 | 65 |
| 24 | BND-700t | 25 | 5540 | 4600 | 4200 | 3750 | 4500 | 11.9 | 55 | 250 | 250 | 50 | 80 | 80 | 1385 | 5350 | 13 | 65 |
| 25 | BND-800t | 25 | 6340 | 4890 | 5000 | 4100 | 5200 | 13 | 55 | 300 | 300 | 50 | 80 | 80 | 1200 | 6150 | 17 | 66 |
| 26 | BND-900t | 30 | 6340 | 4900 | 5000 | 5000 | 6200 | 14.1 | 55 | 300 | 300 | 50 | 80 | 80 | 1200 | 6150 | 17 | 66 |
| 27 | BND-1000t | 40 | 7200 | 5300 | 5000 | 5800 | 7500 | 19.5 | 70 | 300 | 300 | 50 | 80 | 80 | 1385 | 7100 | 17 | 67 |
| 28 | BND-1200t | 40 | 7200 | 5800 | 5000 | 6600 | 8500 | 20.5 | 70 | 300 | 300 | 50 | 80 | 80 | 1385 | 7100 | 17 | 67 |
| 29 | BND-1500t | 50 | 9000 | 8800 | 6000 | 8300 | 9800 | 28.5 | 90 | 400 | 400 | 50 | 80 | 80 | 1717 | 8800 | 17 | 68 |
| 30 | BND-1800t | 60 | 9600 | 9000 | 6000 | 10000 | 11500 | 32.5 | 100 | 500 | 500 | 80 | 100 | 100 | 1853 | 9500 | 17 | 69 |
| 31 | BND-2200t | 75 | 11600 | 9500 | 6000 | 12500 | 13500 | 38.5 | 110 | 500 | 500 | 80 | 100 | 100 | 2200 | 1130 | 17 | 70 |

Round counter-flow low noise series - Design Selection

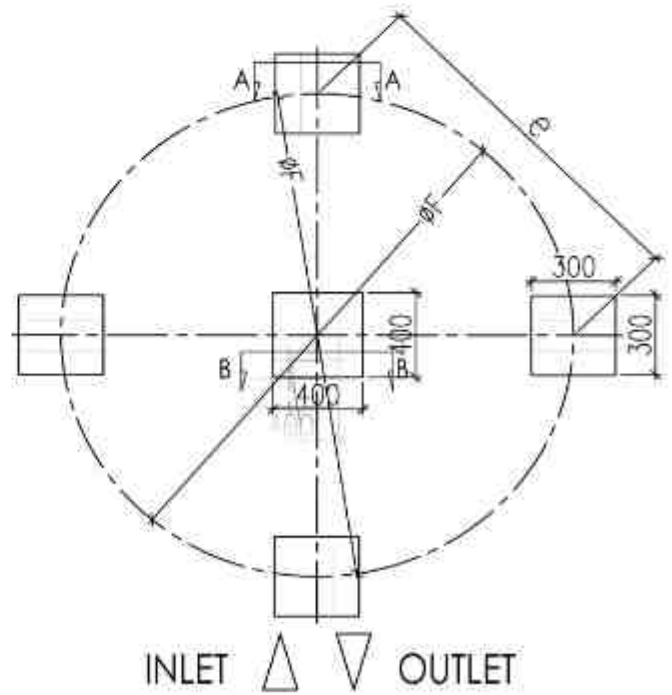
| Wet Bulb 27° C | | | | | Water Flow Rate (L/min) | | | | | Wet Bulb 28° C | | | | | Water Flow Rate (L/min) | | | |
|----------------|-------|-------|-------|-------|-------------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------------------------|-------|------|--------------|
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | Model |
| 37 | 38 | 40 | 42 | 45 | 35 | 40 | 35 | 43 | 45 | 37 | 38 | 43 | 45 | 35 | 35 | 60 | 90 | INLET TEMP. |
| 32 | 32 | 32 | 32 | 32 | 30 | 30 | 29.5 | 33 | 35 | 32 | 32 | 33 | 35 | 29.5 | 30 | 35 | 40 | OUTLET TEMP. |
| 65 | 58 | 45 | 40 | 31 | 42 | 28 | 34 | 45 | 59 | 57 | 49 | 42 | 58 | 26 | 33 | 28 | 23 | BND-5t |
| 130 | 116 | 91 | 79 | 62 | 85 | 57 | 68 | 90 | 119 | 113 | 97 | 85 | 115 | 51 | 66 | 56 | 45 | BND-10t |
| 195 | 175 | 136 | 119 | 93 | 127 | 85 | 102 | 136 | 178 | 170 | 146 | 127 | 173 | 76 | 98 | 85 | 68 | BND-15t |
| 260 | 232 | 181 | 158 | 124 | 170 | 112 | 136 | 181 | 236 | 226 | 194 | 168 | 230 | 102 | 132 | 113 | 90 | BND-20t |
| 390 | 348 | 272 | 237 | 186 | 252 | 168 | 204 | 271 | 354 | 339 | 291 | 252 | 345 | 153 | 198 | 170 | 136 | BND-30t |
| 520 | 464 | 362 | 316 | 248 | 336 | 224 | 272 | 362 | 472 | 452 | 388 | 336 | 460 | 204 | 264 | 226 | 180 | BND-40t |
| 650 | 580 | 452 | 395 | 310 | 420 | 280 | 340 | 452 | 590 | 565 | 485 | 420 | 575 | 255 | 330 | 282 | 226 | BND-50t |
| 780 | 696 | 542 | 474 | 372 | 504 | 336 | 408 | 542 | 708 | 678 | 582 | 504 | 690 | 306 | 396 | 339 | 271 | BND-60t |
| 975 | 875 | 680 | 595 | 465 | 635 | 425 | 510 | 680 | 890 | 850 | 730 | 635 | 865 | 382 | 493 | 425 | 340 | BND-75t |
| 1300 | 1165 | 905 | 790 | 620 | 848 | 565 | 678 | 905 | 1185 | 1130 | 970 | 848 | 1150 | 510 | 655 | 565 | 452 | BND-100t |
| 1625 | 1450 | 1130 | 980 | 775 | 1060 | 705 | 845 | 1130 | 1480 | 1410 | 1210 | 1060 | 1438 | 635 | 818 | 705 | 564 | BND-125t |
| 1950 | 1745 | 1356 | 1185 | 930 | 1270 | 845 | 1020 | 1356 | 1780 | 1695 | 1460 | 1270 | 1725 | 760 | 980 | 847 | 678 | BND-150t |
| 2275 | 2040 | 1585 | 1385 | 1090 | 1485 | 990 | 1188 | 1585 | 2080 | 1980 | 1700 | 1485 | 2020 | 890 | 1150 | 990 | 792 | BND-175t |
| 2600 | 2330 | 1810 | 1580 | 1240 | 1695 | 1130 | 1355 | 1810 | 2370 | 2260 | 1940 | 1695 | 2305 | 1020 | 1310 | 1130 | 904 | BND-200t |
| 2925 | 2620 | 2040 | 1780 | 1400 | 1910 | 1270 | 1530 | 2040 | 2675 | 2545 | 2189 | 1910 | 2595 | 1145 | 1475 | 1272 | 1018 | BND-225t |
| 3250 | 2915 | 2265 | 1980 | 1555 | 2120 | 1415 | 1700 | 2265 | 2970 | 2830 | 2430 | 2120 | 2885 | 1270 | 1640 | 1415 | 1132 | BND-250t |
| 3575 | 3200 | 2490 | 2180 | 1710 | 2330 | 1555 | 1865 | 2490 | 3265 | 3110 | 2675 | 2330 | 3170 | 1400 | 1800 | 1555 | 1244 | BND-275t |
| 3900 | 3490 | 2710 | 2375 | 1965 | 2540 | 1695 | 2030 | 2710 | 3560 | 3390 | 2915 | 2540 | 3455 | 1525 | 1966 | 1695 | 1356 | BND-300t |
| 4550 | 4080 | 3170 | 2770 | 2180 | 2970 | 1980 | 2375 | 3170 | 4155 | 3960 | 3405 | 2970 | 4040 | 1780 | 2295 | 1980 | 1584 | BND-350t |
| 5200 | 4655 | 3615 | 3165 | 2485 | 3390 | 2260 | 2710 | 3615 | 4745 | 4520 | 3890 | 3390 | 4610 | 2035 | 2621 | 2260 | 1808 | BND-400t |
| 5850 | 5240 | 4070 | 3560 | 2800 | 3820 | 2545 | 3055 | 4070 | 5345 | 5090 | 4380 | 3820 | 5190 | 2290 | 2950 | 2545 | 2036 | BND-450t |
| 6500 | 5820 | 4520 | 3955 | 3105 | 4235 | 2825 | 3390 | 4520 | 5930 | 5650 | 4860 | 4240 | 5760 | 2540 | 3275 | 2825 | 2260 | BND-500t |
| 7800 | 6985 | 5425 | 4746 | 3729 | 5085 | 3390 | 4068 | 5425 | 7120 | 6780 | 5830 | 5085 | 6915 | 3050 | 3930 | 3390 | 2712 | BND-600t |
| 9100 | 8160 | 6340 | 5540 | 4360 | 5940 | 3960 | 4750 | 6340 | 8310 | 7920 | 6810 | 5940 | 8080 | 3560 | 4590 | 3960 | 3168 | BND-700t |
| 10400 | 9320 | 7240 | 6335 | 4980 | 6785 | 4525 | 5430 | 7240 | 9500 | 9050 | 7785 | 6785 | 9230 | 4075 | 5250 | 4525 | 3620 | BND-800t |
| 11700 | 10485 | 8145 | 7125 | 5600 | 7635 | 5090 | 6110 | 8145 | 10690 | 10180 | 8755 | 7635 | 10385 | 4580 | 5905 | 5090 | 4072 | BND-900t |
| 13000 | 11650 | 9048 | 7915 | 6220 | 8480 | 5655 | 6785 | 9045 | 11875 | 11310 | 9725 | 8480 | 11535 | 5090 | 6560 | 5655 | 4524 | BND-1000t |
| 15600 | 13975 | 10855 | 9500 | 7465 | 10175 | 6785 | 8140 | 10855 | 14245 | 13570 | 11670 | 10175 | 13840 | 6105 | 7870 | 6790 | 5428 | BND-1200t |
| 19500 | 17460 | 13560 | 11865 | 9320 | 12710 | 8475 | 10170 | 13560 | 17800 | 16950 | 14575 | 12710 | 17290 | 7625 | 9830 | 8475 | 6780 | BND-1500t |
| 23400 | 20970 | 16290 | 14250 | 11200 | 15270 | 10180 | 12220 | 16290 | 21380 | 20360 | 17510 | 15270 | 20770 | 9160 | 11810 | 10180 | 8144 | BND-1800t |
| 28600 | 25630 | 19910 | 17380 | 13640 | 18645 | 12430 | 14905 | 19910 | 26070 | 24860 | 21340 | 18645 | 25355 | 11220 | 14410 | 12430 | 9944 | BND-2200t |

BND Series

Round counter-flow standard low noise tower series outline drawing

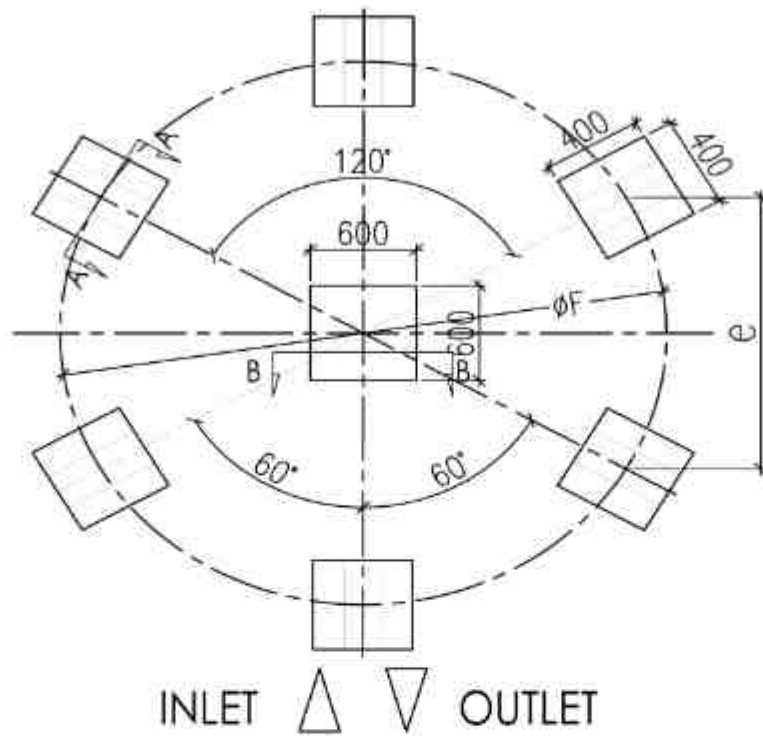


BND - 5-30T

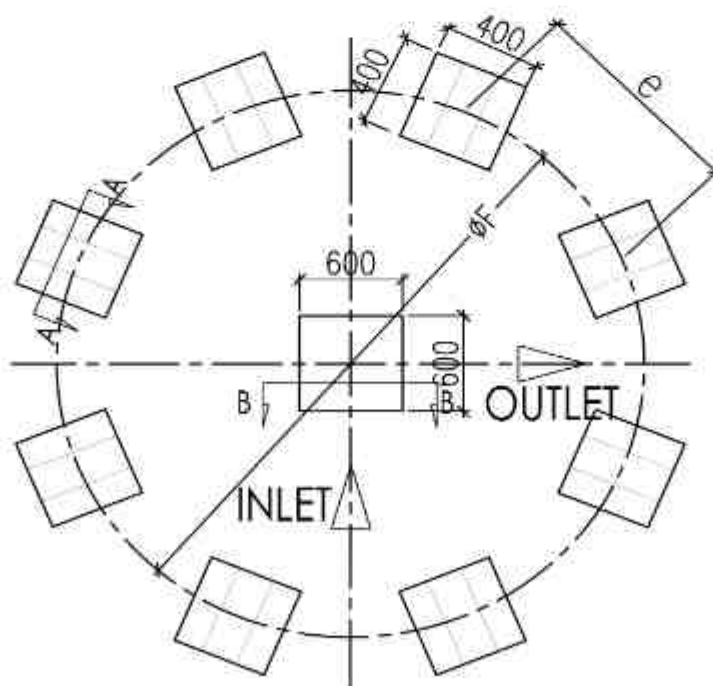


BND - 40-75T

Round counter-flow standard low noise tower series outline drawing



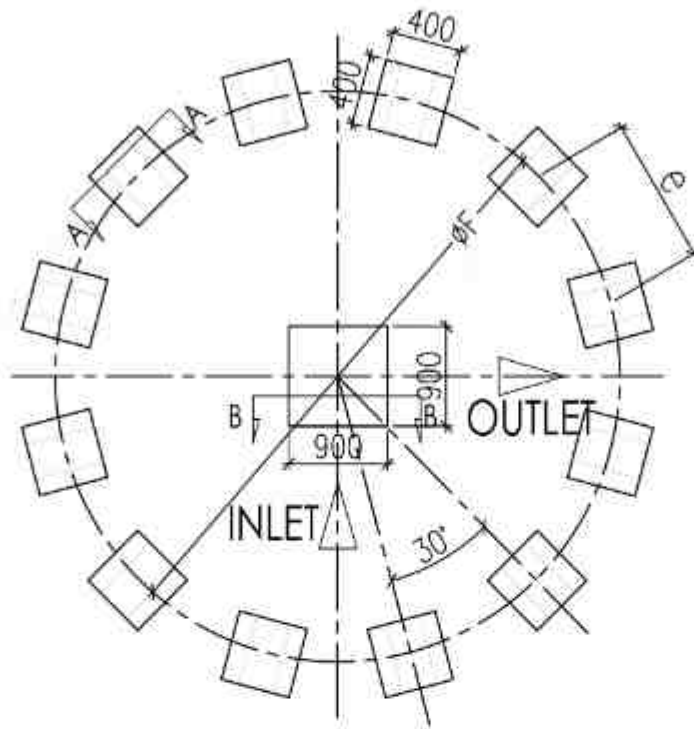
BND - 100-150T



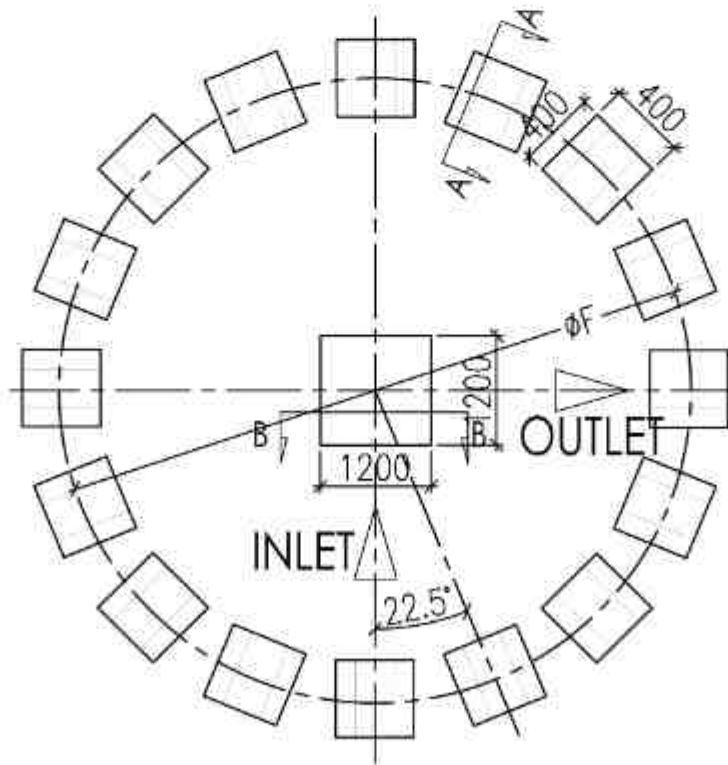
BND - 175-350T

BND Series

Round counter-flow standard low noise tower series outline drawing



BND - 400-700T



BND - 800-2200T

Square counter-flow closed circuit cooling tower

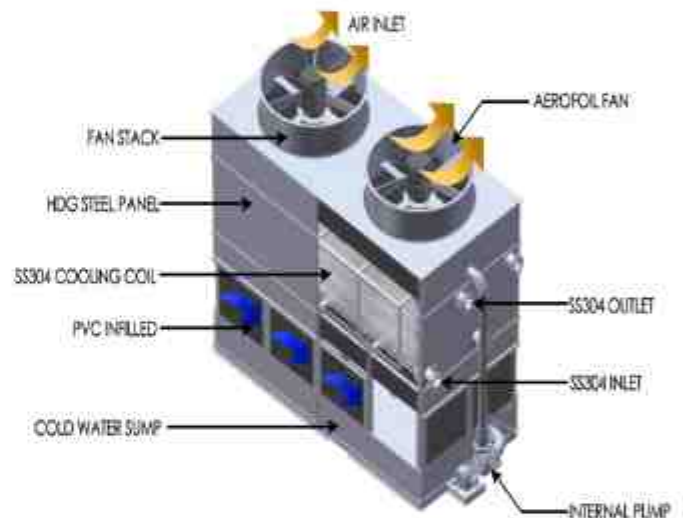
A closed circuit square counter flow tower, also known as a closed-circuit cooling tower, is a type of cooling tower used in various industries to cool process water or other fluids. In this type of tower, the hot process water or fluid is circulated through a heat exchanger within the tower, while the cooling water is sprayed over the exchanger's external surface. The cooling water absorbs the heat from the process fluid, causing it to evaporate and transfer the heat to the atmosphere. The cooled process fluid then returns to the industrial process for reuse.

Unlike an open circuit cooling tower, a closed circuit tower keeps the process fluid separate from the cooling water, preventing contamination and water loss. The counter flow design allows for maximum heat transfer efficiency between the two fluids, resulting in greater energy savings and improved environmental sustainability. Closed circuit square counter flow towers are commonly used in industries such as power generation, chemical manufacturing, and HVAC systems.

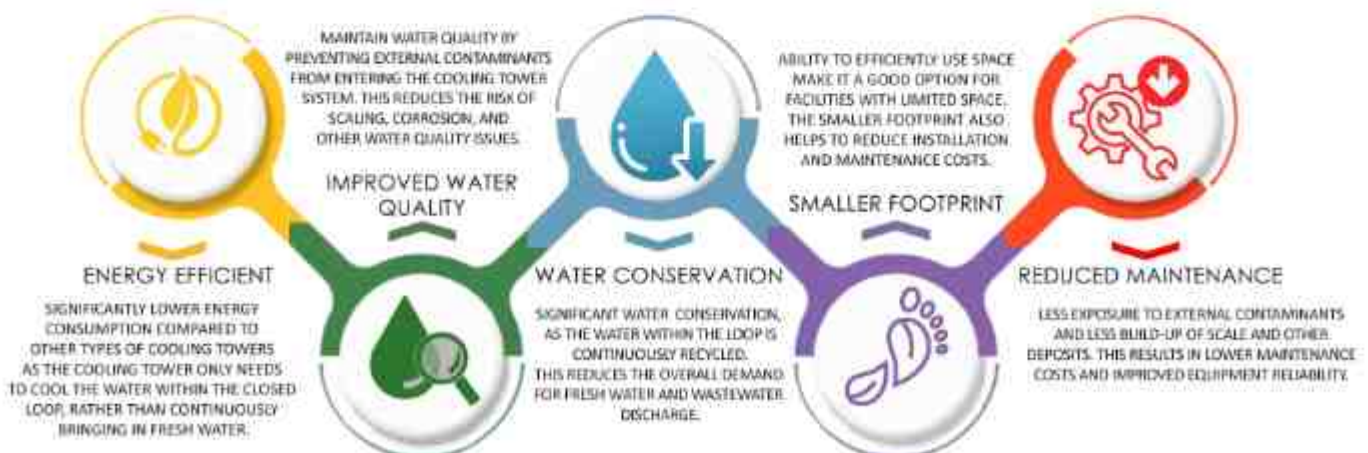
Key Features:

- ◆ Certified by COOLING TOWER INSTITUTE (C139A-23R00).
- ◆ Water flows in the opposite direction to the air. This maximizes heat transfer and efficiency.
- ◆ Efficient use of space and a uniform air flow distribution.
- ◆ Closed circuit system, where the water is circulated within a closed loop. This minimizes water consumption and prevents contamination.
- ◆ High efficiency fill material, maximizes the contact surface area and increases heat transfer and efficiency.

Structural Model



Advantages

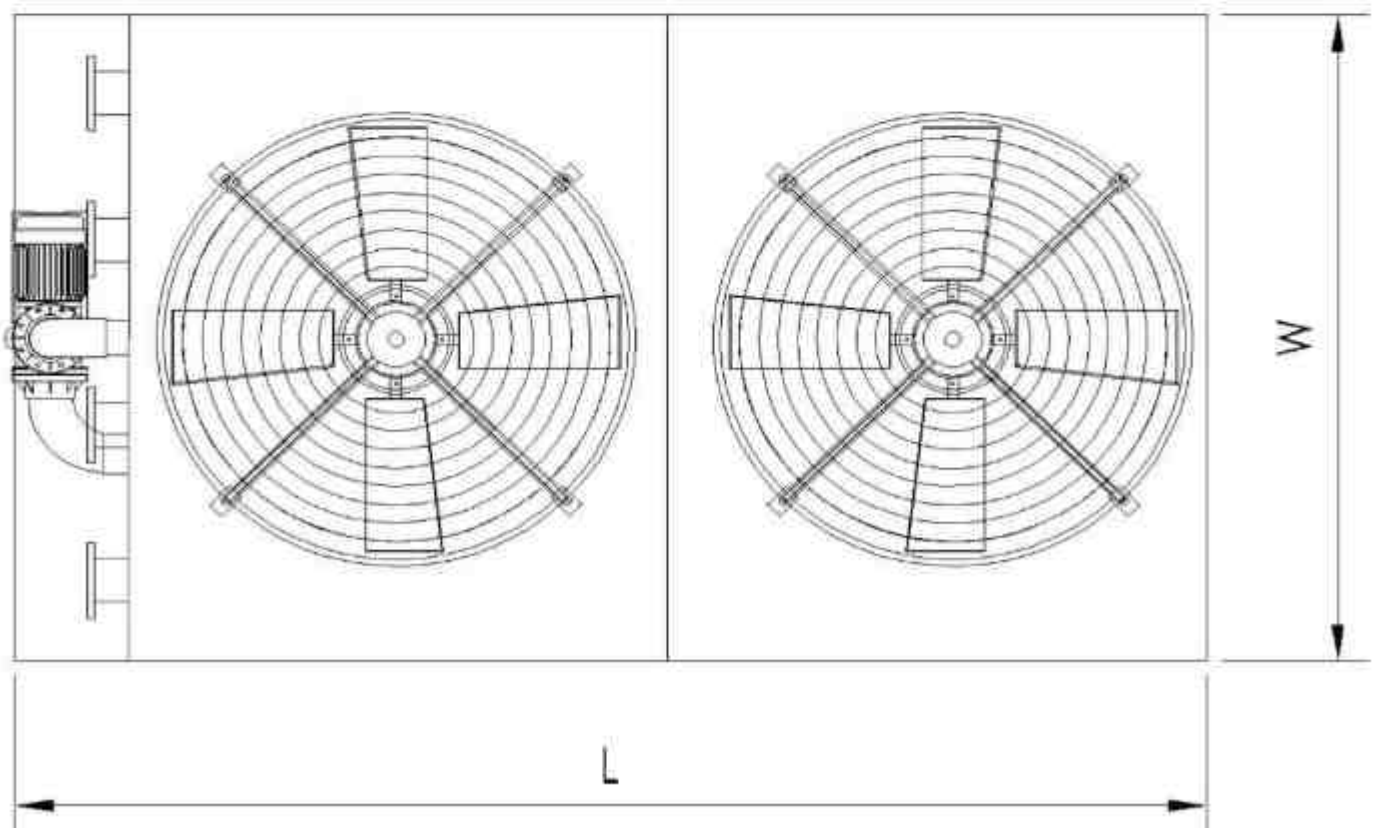


SQBN Series

Square counter-flow close circuit tower series - Technical Specifications (I)

| Model | | SQBN-10 | SQBN-15 | SQBN-20 | SQBN-25 | SQBN-30 | SQBN-40 | SQBN-50 | SQBN-60 | SQBN-70 | SQBN-80 | SQBN-90 | |
|------------------------------|--------------------------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|
| Cooling Capacity | Energy (Kcal) | 50000 | 75000 | 100000 | 125000 | 150000 | 200000 | 250000 | 300000 | 350000 | 400000 | 450000 | |
| | Power (KW) | 58 | 87 | 116 | 145 | 174 | 233 | 291 | 348 | 407 | 465 | 523 | |
| Work Traffic | Flow Rate (T/h) | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | |
| Fans | Power (KW) | 1.1x1 | 2.2x1 | 1.1x2 | 1.1x2 | 1.1x2 | 2.2x2 | 2.2x2 | 2.2x2 | 3x2 | 3x2 | 3x2 | |
| | Air volume (m ³ /h) | 15000 | 30000 | 30000 | 30000 | 30000 | 60000 | 60000 | 60000 | 80000 | 80000 | 80000 | |
| Sprinkler Pumps | Power (KW) | 0.75 | 0.75 | 0.75 | 1.1 | 1.1 | 1.1 | 1.1 | 1.5 | 1.5 | 2.2 | 2.2 | |
| | Flow Rate (T/h) | 16 | 16 | 20 | 45 | 45 | 45 | 45 | 65 | 65 | 120 | 120 | |
| | Head m | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | |
| Water Tank | T | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1 | |
| Weight (Split) | Shipping (Kg) | 500 | 680 | 750 | 850 | 1200 | 1550 | 1680 | 1850 | 2000 | 2350 | 2660 | |
| | Run (Kg) | 800 | 1050 | 1200 | 1390 | 2700 | 3200 | 3450 | 3700 | 4000 | 4560 | 5000 | |
| Dimensions | Split | length (mm) | 1550 | 2000 | 2300 | 2800 | 2800 | 2850 | 2850 | 3650 | 3650 | 3850 | 3850 |
| | | width (mm) | 1150 | 1150 | 1150 | 1150 | 1150 | 1600 | 1700 | 1700 | 1700 | 1900 | 2200 |
| | | height (mm) | 2180 | 2500 | 2500 | 2650 | 2790 | 2850 | 2900 | 3000 | 3200 | 3350 | 3450 |
| | Siamese | length (mm) | 2350 | 2900 | 3200 | 3900 | 3900 | 3900 | 3900 | 4750 | 4750 | 5000 | 5000 |
| | | width (mm) | 1150 | 1150 | 1150 | 1150 | 1150 | 1600 | 1700 | 1700 | 1700 | 1900 | 2200 |
| | | height (mm) | 2180 | 2500 | 2500 | 2650 | 2790 | 2850 | 2900 | 3000 | 3200 | 3350 | 3450 |
| Inlet & Outlet Water Caliber | DN | 65 | 65 | 65 | 80 | 80 | 80 | 100 | 100 | 125 | 125 | 100x2 | |
| Hydration Caliber | DN | 20 | 20 | 20 | 25 | 25 | 25 | 25 | 25 | 25 | 32 | 32 | |
| Discharge Caliber | DN | 25 | 25 | 25 | 32 | 32 | 32 | 32 | 32 | 32 | 40 | 40 | |

Square counter-flow close circuit tower series outline drawing

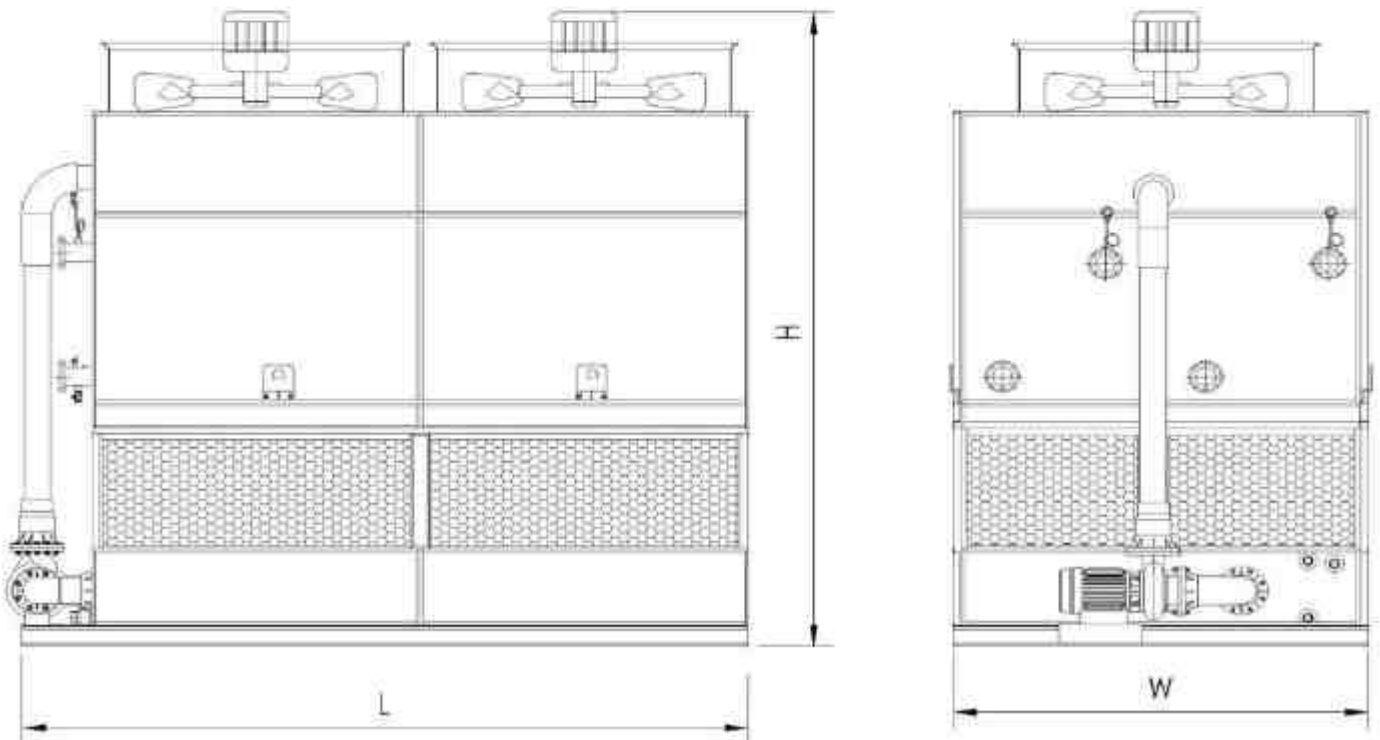


SQBN Series

Square counter-flow close circuit tower series - Technical Specifications (II)

| Model | | SQBN-100 | SQBN-125 | SQBN-150 | SQBN-200 | SQBN-215 | SQBN-230 | SQBN-350 | SQBN-280 | SQBN-300 | SQBN-350 | SQBN-400 | |
|------------------------------|--------------------------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------|
| Cooling Capacity | Energy (Kcal) | 500000 | 625000 | 750000 | 1000000 | 1080000 | 1150000 | 1250000 | 1400000 | 1500000 | 1750000 | 2000000 | |
| | Power (KW) | 581 | 727 | 872 | 1046 | 1163 | 1337 | 1453 | 1628 | 1744 | 2034 | 2326 | |
| Work Traffic | Flow Rate (T/h) | 100 | 125 | 150 | 180 | 200 | 230 | 250 | 280 | 300 | 350 | 400 | |
| Fans | Power (KW) | 3x2 | 4x2 | 5.5x2 | 5.5x2 | 7.5x2 | 7.5x2 | 7.5x2 | 11x2 | 11x2 | 15x2 | 15x2 | |
| | Air volume (m ³ /h) | 80000 | 100000 | 170000 | 170000 | 200000 | 200000 | 200000 | 300000 | 300000 | 350000 | 350000 | |
| Sprinkler Pumps | Power (KW) | 2.2 | 2.2 | 4 | 4 | 7.5 | 7.5 | 7.5 | 7.5 | 4x2 | 4x2 | 4x2 | |
| | Flow Rate (T/h) | 120 | 120 | 180 | 180 | 230 | 230 | 270 | 270 | 360 | 360 | 360 | |
| | Head m | 5 | 5 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | |
| Water Tank | T | 1 | 2 | 2 | 2 | 3 | / | / | / | / | / | / | |
| Weight (Split) | Shipping (Kg) | 2790 | 3200 | 3800 | 4250 | 5000 | 5220 | 5800 | 6290 | 6800 | 7500 | 8260 | |
| | Run (Kg) | 5380 | 6660 | 8000 | 9300 | 11200 | 12500 | 13000 | 13900 | 14900 | 15500 | 16360 | |
| Dimensions | Split | length (mm) | 3850 | 4300 | 4900 | 5300 | 5950 | 5950 | 6250 | 6250 | 6950 | 6950 | 7750 |
| | | width (mm) | 2200 | 2400 | 2400 | 2600 | 2700 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 |
| | | height (mm) | 3450 | 3600 | 3700 | 3830 | 3870 | 4300 | 4500 | 4500 | 4650 | 4750 | 5000 |
| | Siamese | length (mm) | 5000 | / | / | / | / | / | / | / | / | / | / |
| | | width (mm) | 2200 | / | / | / | / | / | / | / | / | / | / |
| | | height (mm) | 3450 | / | / | / | / | / | / | / | / | / | / |
| Inlet & Outlet Water Caliber | DN | 100x2 | 125x2 | 125x2 | 125x2 | 150x2 | 150x2 | 150x2 | 150x2 | 200x2 | 200x2 | 200x2 | |
| Hydration Caliber | DN | 32 | 32 | 40 | 40 | 40 | 40 | 40 | 50 | 50 | 50 | 50 | |
| Discharge Caliber | DN | 40 | 40 | 50 | 50 | 50 | 50 | 50 | 65 | 65 | 65 | 65 | |

Square counter-flow close circuit tower series outline drawing



SQBH Series

Square cross-flow close circuit tower series

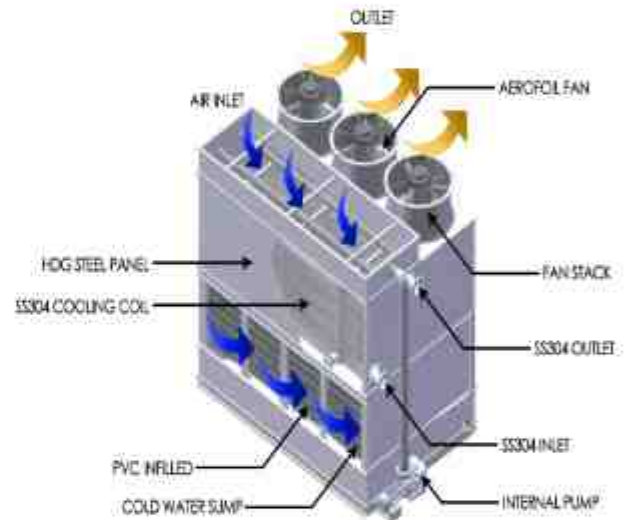
A single side and top side air entry closed circuit cross flow cooling tower is a type of cooling tower that uses a cross-flow design and has air entry on one side and from the top. In this type of cooling tower, the hot water enters from the top of the tower and flows downward through the fill material, while the air enters the tower from one side and flows horizontally across the water flow. The air flow passes through the fill material, which increases the contact area between the water and air, allowing for more efficient heat transfer. As the air flows through the fill material, it evaporates a small amount of water, which causes the remaining water to be cooled.

The cooled water is then collected in a basin at the bottom of the tower and pumped back to the heat source for further cooling. The water in the tower is kept in a closed loop system to prevent contamination and minimize water usage. The single side and top side air entry design of this cooling tower allows for a more uniform distribution of air across the fill material, which results in more efficient heat transfer and better cooling performance. Additionally, the closed circuit system reduces the overall water usage and minimizes the risk of scaling, corrosion, and other water quality issues.

Key Features:

1. Certified by COOLING TOWER INSTITUTE (C139A-23R00).
2. Water flows in the horizontally across the water flow. This maximizes heat transfer and efficiency.
3. Air enters the tower from one side and from the top, which allows for a more uniform distribution of air across the fill material and better cooling performance.
4. Water is circulated within a closed loop. This minimizes water consumption and prevents contamination.
5. High efficiency infill material, maximizes the contact surface area and increases heat transfer and efficiency.

Structural Model



Advantages

ENERGY EFFICIENT

SIGNIFICANTLY LOWER ENERGY CONSUMPTION COMPARED TO OTHER TYPES OF COOLING TOWERS AS THE COOLING TOWER ONLY NEEDS TO COOL THE WATER WITHIN THE CLOSED LOOP, RATHER THAN CONTINUOUSLY BRINGING IN FRESH WATER.



LOW NOISE LEVELS

FAN AND MOTOR SYSTEM OF THE COOLING TOWER IS TYPICALLY DESIGNED FOR LOW NOISE LEVELS, MAKING IT A GOOD OPTION FOR INSTALLATIONS IN NOISE-SENSITIVE ENVIRONMENTS.



WATER CONSERVATION

SIGNIFICANT WATER CONSERVATION, AS THE WATER WITHIN THE LOOP IS CONTINUOUSLY RECYCLED. THIS REDUCES THE OVERALL DEMAND FOR FRESH WATER AND WASTEWATER DISCHARGE.



SMALLER FOOTPRINT

ABILITY TO EFFICIENTLY USE SPACE MAKE IT A GOOD OPTION FOR FACILITIES WITH LIMITED SPACE. THE SMALLER FOOTPRINT ALSO HELPS TO REDUCE INSTALLATION AND MAINTENANCE COSTS.



IMPROVED WATER QUALITY

MAINTAIN WATER QUALITY BY PREVENTING EXTERNAL CONTAMINANTS FROM ENTERING THE COOLING TOWER SYSTEM. THIS REDUCES THE RISK OF SCALING, CORROSION, AND OTHER WATER QUALITY ISSUES.

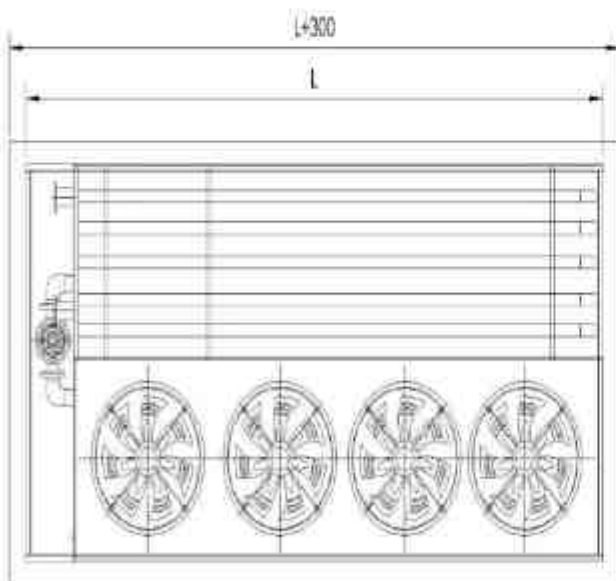


SQBH Series

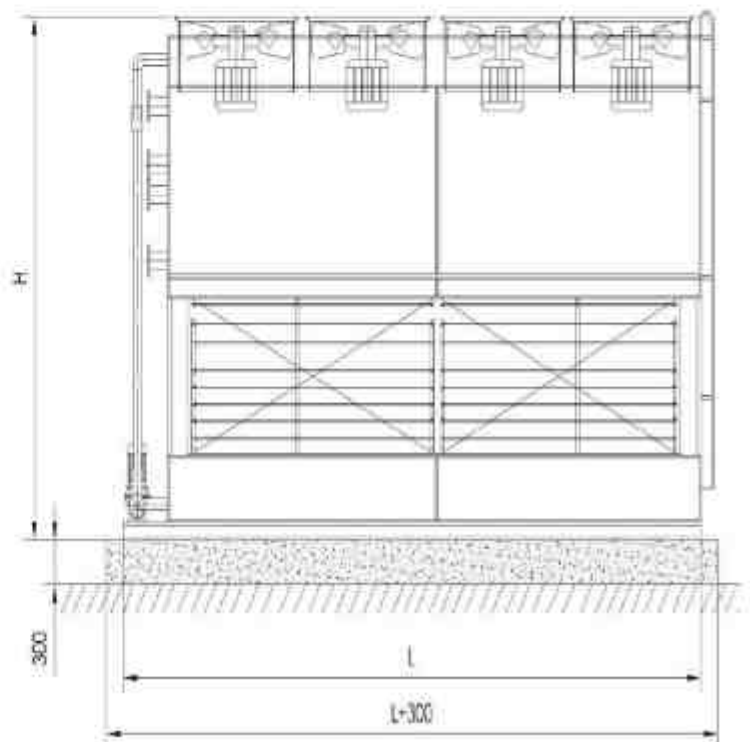
Square cross-flow close circuit tower series - Technical Specifications(I)

| Model | | SQBH-30 | SQBH-40 | SQBH-50 | SQBH-60 | ZSBH-70 | ZSBH-80 | ZSBH-90 | ZSBH-100 | ZSBH-125 | |
|------------------------------|--------------------------------|-------------|---------|---------|---------|---------|---------|---------|----------|----------|------|
| Cooling Capacity | Energy (Kcal) | 150000 | 200000 | 250000 | 300000 | 350000 | 400000 | 450000 | 500000 | 625000 | |
| | Power (KW) | 174 | 233 | 291 | 348 | 407 | 465 | 523 | 581 | 727 | |
| Work Traffic | Flow Rate (T/h) | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 125 | |
| Fans | Power (KW) | 1.5x2 | 1.5x2 | 1.5x2 | 2.2x2 | 2.2x2 | 1.5x3 | 2.2x3 | 2.2x3 | 1.5x4 | |
| | Air volume (m ³ /h) | 50000 | 50000 | 50000 | 50000 | 60000 | 75000 | 90000 | 90000 | 100000 | |
| Sprinkler Pumps | Power (KW) | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.5 | 1.5 | 1.5 | 2.2 | |
| | Flow Rate (T/h) | 45 | 45 | 45 | 45 | 45 | 65 | 65 | 65 | 120 | |
| | Head m | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| Water Tank | T | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1 | 1 | 1 | 2 | |
| Weight (Split) | Shipping (Kg) | 1000 | 1250 | 1400 | 1550 | 1790 | 1900 | 2200 | 2400 | 3000 | |
| | Run (Kg) | 2400 | 2700 | 3000 | 3350 | 3750 | 4200 | 4800 | 5200 | 6450 | |
| Dimensions | Split | length (mm) | 2800 | 2800 | 2800 | 2800 | 2800 | 3850 | 3850 | 3850 | 4300 |
| | | width (mm) | 1700 | 1900 | 1900 | 2200 | 2200 | 2200 | 2200 | 2400 | 2400 |
| | | height (mm) | 2650 | 2650 | 2700 | 2700 | 2800 | 2900 | 3000 | 3000 | 3200 |
| | Siamese | length (mm) | 3900 | 3900 | 3900 | 3900 | 3900 | 4750 | 5000 | 5000 | / |
| | | width (mm) | 1700 | 1900 | 1900 | 2200 | 2200 | 2200 | 2200 | 2400 | / |
| | | height (mm) | 2650 | 2650 | 2700 | 2700 | 2800 | 2900 | 3000 | 3000 | / |
| Inlet & Outlet Water Caliber | DN | 80 | 80 | 100 | 100 | 125 | 125 | 100x2 | 100x2 | 125x2 | |
| Hydration Caliber | DN | 25 | 25 | 25 | 25 | 25 | 32 | 32 | 32 | 32 | |
| Discharge Caliber | DN | 32 | 32 | 32 | 32 | 32 | 40 | 40 | 40 | 40 | |

Square cross-flow close circuit tower series outline drawing



SQBH COMPOSITE FLOW
(ONE-SIDE AIR INTAKE) CLOSED COOLING TOWER

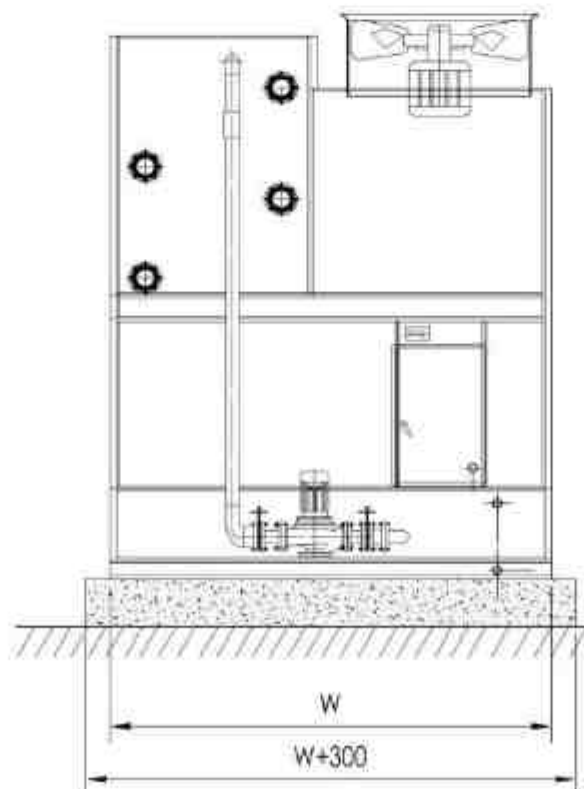


SQBH Series

Square cross-flow close circuit tower series - Technical Specifications (II)

| Model | | SQBH-150 | SQBH-180 | SQBH-200 | SQBH-230 | SQBH-250 | SQBH-280 | SQBH-300 | SQBH-350 | SQBH-400 | |
|------------------------------|--------------------------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|------|
| Cooling Capacity | Energy (Kcal) | 750000 | 900000 | 1000000 | 1150000 | 1250000 | 1400000 | 1500000 | 1750000 | 2000000 | |
| | Power (KW) | 872 | 1046 | 1163 | 1337 | 1453 | 1628 | 1744 | 2034 | 2328 | |
| Work Traffic | Flow Rate (T/h) | 150 | 180 | 200 | 230 | 250 | 280 | 300 | 350 | 400 | |
| Fans | Power (KW) | 2.2x4 | 3x4 | 3x4 | 3x4 | 3x4 | 4x4 | 4x4 | 5.5x4 | 5.5x4 | |
| | Air volume (m ³ /h) | 120000 | 120000 | 180000 | 180000 | 180000 | 200000 | 200000 | 350000 | 350000 | |
| Sprinkler Pumps | Power (KW) | 2.2 | 2.2 | 3 | 3 | 4 | 4 | 7.5 | 7.5 | 4x2 | |
| | Flow Rate (T/h) | 120 | 120 | 150 | 150 | 180 | 180 | 270 | 270 | 360 | |
| | Head (m) | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 5 | |
| Water Tank | T | 2 | 2 | 3 | / | / | / | / | / | / | |
| Weight (Split) | Shipping (Kg) | 3600 | 4000 | 4700 | 5100 | 5600 | 6000 | 6600 | 7300 | 8000 | |
| | Run (Kg) | 7800 | 9000 | 10500 | 12000 | 12800 | 13500 | 14500 | 15200 | 16000 | |
| Dimensions | Split | length (mm) | 4900 | 5300 | 5950 | 5350 | 6250 | 6250 | 6950 | 6950 | 7750 |
| | | width (mm) | 2400 | 2700 | 2700 | 2700 | 2800 | 2800 | 3000 | 3000 | 3000 |
| | | height (mm) | 3300 | 3500 | 3800 | 3600 | 3800 | 3800 | 4200 | 4300 | 4900 |
| | Siamese | length (mm) | / | / | / | / | / | / | / | / | / |
| | | width (mm) | / | / | / | / | / | / | / | / | / |
| | | height (mm) | / | / | / | / | / | / | / | / | / |
| Inlet & Outlet Water Caliber | DN | 125x2 | 125x2 | 150x2 | 150x2 | 150x2 | 150x2 | 200x2 | 200x2 | 200x2 | |
| Hydration Caliber | DN | 40 | 40 | 40 | 40 | 40 | 50 | 50 | 50 | 50 | |
| Discharge Caliber | DN | 50 | 50 | 50 | 50 | 50 | 65 | 65 | 65 | 65 | |

Square cross-flow close circuit tower series outline drawing



Square cross-flow close circuit tower series

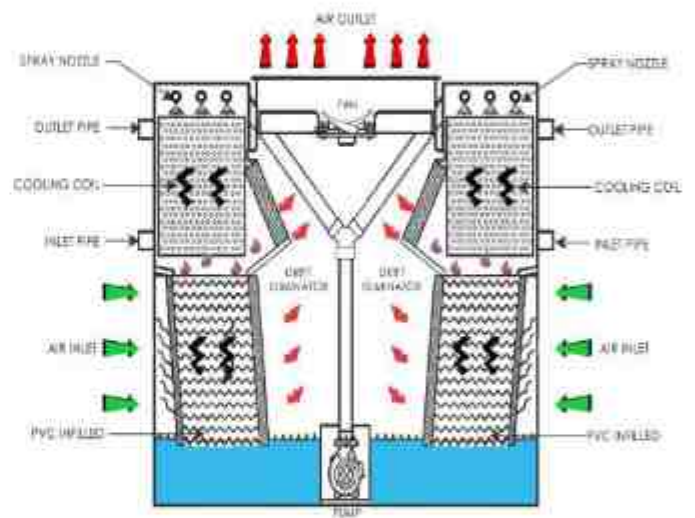
A two-side air entry closed circuit cross flow cooling tower is a type of cooling tower that utilizes a cross-flow design and has air entry on two sides. In this type of cooling tower, the hot water enters from the top of the tower and flows downward through the fill material, while the air enters the tower from the two opposite sides and flows horizontally across the water flow. The air flow passes through the fill material, which increases the contact area between the water and air, allowing for more efficient heat transfer. As the air flows through the fill material, it evaporates a small amount of water, which causes the remaining water to be cooled.

The cooled water is then collected in a basin at the bottom of the tower and pumped back to the heat source for further cooling. The water in the tower is kept in a closed loop system to prevent contamination and minimize water usage. The two-side air entry design of this cooling tower allows for a more uniform distribution of air across the fill material, which results in more efficient heat transfer and better cooling performance. Additionally, the closed circuit system reduces the overall water usage and minimizes the risk of scaling, corrosion, and other water quality issues.

Key Features:

1. Certified by COOLING TECHNOLOGY INSTITUTE (C139A-23R00)
2. Water flows in the horizontally across the water flow. This maximizes heat transfer and efficiency.
3. Typically square in shape, which allows for efficient use of space and a uniform air flow distribution.
4. Water is circulated within a closed loop. This minimizes water consumption and prevents contamination.
5. High efficiency fill material, maximizes the contact surface

Structural Model



Advantages

ENERGY EFFICIENT

SIGNIFICANTLY LOWER ENERGY CONSUMPTION COMPARED TO OTHER TYPES OF COOLING TOWERS AS THE COOLING TOWER ONLY NEEDS TO COOL THE WATER WITHIN THE CLOSED LOOP RATHER THAN CONTINUOUSLY BRINGING IN FRESH WATER.

WATER CONSERVATION

SIGNIFICANT WATER CONSERVATION AS THE WATER WITHIN THE LOOP IS CONTINUOUSLY RECYCLED. THIS REDUCES THE OVERALL DEMAND FOR FRESH WATER AND WASTEWATER DISCHARGE.

IMPROVED WATER QUALITY

MINIMIZE WATER CONTACT WITH EXTERNAL CONTAMINANTS FROM ENTERING THE COOLING TOWER SYSTEM. THIS MINIMIZES THE RISK OF SCALING, CORROSION, AND OTHER WATER QUALITY ISSUES.

EASY MAINTENANCE

LOWER MAINTENANCE COSTS AND IMPROVED EQUIPMENT RELIABILITY. ADDITIONALLY, THE EASY ACCESS TO THE FILL MATERIAL AND OTHER COMPONENTS OF THE TOWER MINIMIZES MAINTENANCE AND CLEANING TIMES.

SMALLER FOOTPRINT

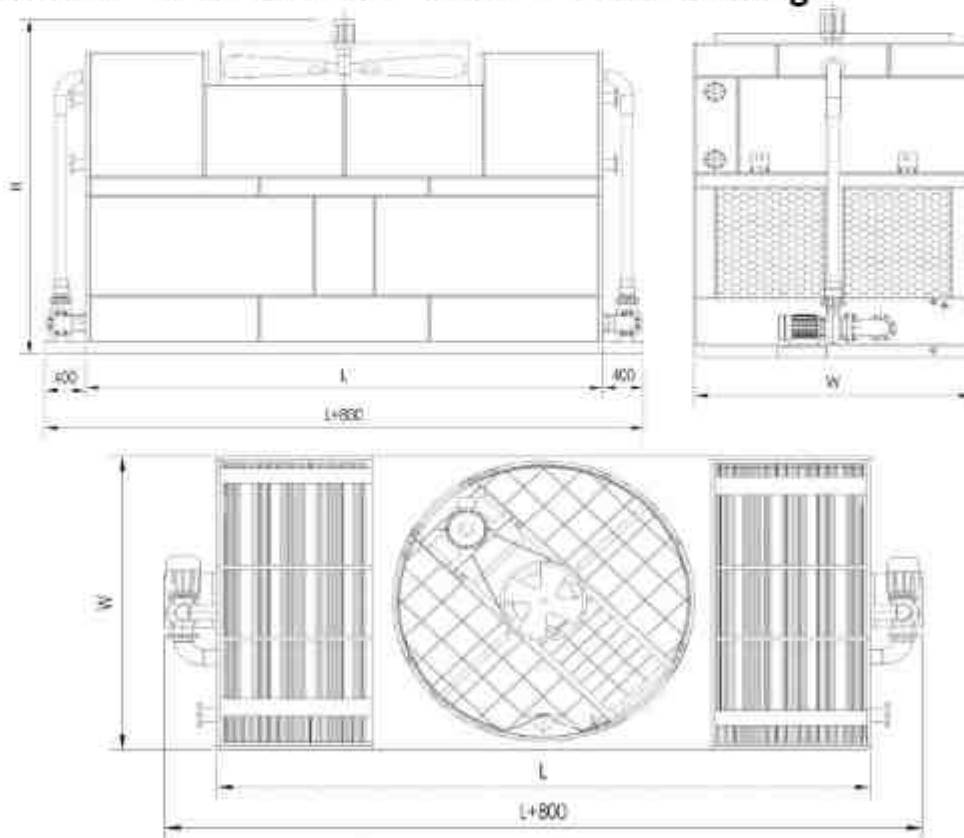
ABILITY TO FIT INTO USE SPACE MAKES IT A GOOD OPTION FOR FACILITIES WITH LIMITED SPACE. THE SMALLER FOOTPRINT ALSO HELPS TO REDUCE INSTALLATION AND MAINTENANCE COSTS.

SQBF Series

Square cross-flow close circuit tower series - Technical Specifications

| No. | Model | Heat Removal | flow (m ³ /h) | Work | Spray Pump | | Fan | | Import & | Dimensions | | | Unit | Running |
|-----|-----------|--------------|--------------------------|-----------------|-------------|---------------------------|-------------|---------------------------|--------------------|--------------|-------------|--------------|--------------|--------------|
| | SQBF-S | Kcal/h | 5°C, wet bulb 28°C | Pressure Mpa | Power KW | Flow m ³ /h | Power KW | Flow m ³ /h | Export Diameter | length mm | Width mm | height mm | Weight KG | Weight KG |
| 1 | SQBF-80S | 400000 | 80 | 0.3 | 2.2 | 100 | 1.5 * 3 | 75000 | 12 | 3650 | 2200 | 2900 | 1900 | 4200 |
| 2 | SQBF-90S | 450000 | 90 | 0.3 | 2.2 | 100 | 2.2 * 3 | 90000 | 100 * 2 | 3850 | 2200 | 3000 | 2200 | 4800 |
| 3 | SQBF-100S | 500000 | 100 | 0.3 | 2.2 | 100 | 2.2 * 3 | 90000 | 100 * 2 | 3850 | 2400 | 3000 | 2400 | 5200 |
| 4 | SQBF-125S | 625000 | 125 | 0.3 | 3.7 | 170 | 1.5 * 4 | 100000 | 125 * 2 | 4300 | 2400 | 3200 | 3000 | 6450 |
| 5 | SQBF-150S | 750000 | 150 | 0.3 | 3.7 | 160 | 2.2 * 4 | 120000 | 125 * 2 | 4900 | 2400 | 3300 | 3500 | 7800 |
| 6 | SQBF-180S | 900000 | 180 | 0.3 | 5.5 | 200 | 3 * 4 | 120000 | 125 * 2 | 5300 | 2700 | 3500 | 4000 | 9000 |
| 7 | SQBF-200S | 1000000 | 200 | 0.4 | 5.5 | 220 | 3 * 4 | 180000 | 150 * 2 | 5950 | 2700 | 3600 | 4700 | 10500 |
| 8 | SQBF-230S | 1150000 | 230 | 0.4 | 5.5 | 235 | 3 * 4 | 180000 | 150 * 2 | 5950 | 2700 | 3600 | 5100 | 12000 |
| 9 | SQBF-250S | 1250000 | 250 | 0.4 | 7.5 | 290 | 3 * 4 | 180000 | 150 * 2 | 6250 | 2800 | 3800 | 5600 | 12800 |
| 10 | SQBF-280S | 1400000 | 280 | 0.4 | 7.5 | 290 | 4 * 4 | 200000 | 150 * 2 | 6250 | 2800 | 3800 | 6000 | 13500 |
| 11 | SQBF-300S | 1500000 | 300 | 0.4 | 7.5 | 290 | 4 * 4 | 200000 | 200 * 2 | 6950 | 3000 | 4200 | 6600 | 14500 |
| 12 | SQBF-350S | 1750000 | 350 | 0.4 | 5.5 * 2 | 350 | 5.5 * 4 | 350000 | 200 * 2 | 6950 | 3000 | 4500 | 7300 | 15200 |
| 13 | SQBF-400S | 2000000 | 400 | 0.4 | 7.5 * 2 | 450 | 5.5 * 4 | 350000 | 200 * 2 | 7750 | 3000 | 4900 | 8000 | 16000 |

Square cross-flow close circuit tower series outline drawing



SQBF COMPOSITE FLOW
(ONE-SIDE AIR INTAKE) CLOSED COOLING TOWER

Handling Instructions

- a. Use lifting equipment to move the cooling tower to the installation site to avoid damage to the tower structure.
- b. Check the structural integrity of the cooling tower before installation and ensure that it is not damaged during transportation.
- c. Use proper personal protective equipment (PPE) such as gloves, safety glasses, and hard hats during installation.
- d. Properly level the cooling tower on its foundation to prevent excessive vibrations or structural damage during operation.
- e. Check all parts of the cooling tower to ensure they are free of debris, corrosion, or other damage before use.
- f. Use appropriate cleaning agents to remove any rust or corrosion from the cooling tower surfaces before use.
- g. Train all personnel who will be operating or maintaining the cooling tower on its proper use and maintenance procedures.

Installation

- a. Select an appropriate location for the cooling tower, away from any heat sources or other obstructions that could interfere with its operation.
- b. Ensure that the foundation is stable and able to support the weight of the cooling tower, as well as any additional weight from water and equipment.
- c. Follow the manufacturer's instructions for assembling and connecting the various components of the cooling tower, including the fan, motor, and water distribution system.
- d. Connect the water supply and drain lines to the cooling tower, ensuring that they are properly sealed and leak-free.
- e. Install all necessary electrical components, including wiring and controls, in accordance with local and national electrical codes.
- f. Perform a thorough inspection of the cooling tower and all its components before operation to ensure that everything is properly installed and connected.
- g. Conduct a trial run of the cooling tower to test its operation and make any necessary adjustments or repairs.

Before Operation

1. Fill the cold water basin up to the top level of the overflow pipe.
2. Run the circulating pump for a while to force air out of the pipes until the pipes and cold water basin are filled up with water. Be careful not to allow air to be sucked into the cooling water pipe.
3. Bring the circulating pump into full operation and adjust the flow control valve so that the water level of the distribution basin is well balanced. The circulating water flow rate is then adjusted with the overall flow control valve located at pump outlet.
4. The ball tap of the automatic make-up water inlet pipe should be adjusted so that water interrupted slightly below the overflow water level.



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