



WIN Equipments



EVAPORATIVE COOLING TOWER

WCT
Service



TEFC IP55 Extended Shaft CT Motors

Dynamic Balanced Axial Flow Fan

Honey Comb Design PVC Fills

Automatic Rotary Sprinkler, Spray Nozzles

Anti Corrosive Fasteners

HDG MS Structure

UV Resin – FRP Casing

capacity : 10 to 300 TR

Inlet Water Pressure : 2 to 3 bar g

Inlet Water Temperature : 40 to 100°C

Outlet Water Temperature : WBT + 4 deg



Working Principle

A cooling tower is a heat rejection device, which extracts waste heat from the Application to the atmosphere by using the fan and motor. The type of heat rejection in a cooling tower is termed "evaporative". To Maintain the Temperature Limit, We Use Cooling Towers to get high performance from the Machine. It should be kept with in the Temperature Limits.

Hot water flows to the main sewer of the water distribution system. Then, the water is distributed through a pipe system to spray nozzles. Nozzles cause the dispersion of the water onto the wet deck surface, thus creating water film of large contact surface. The water coming off the lower edges of the wet deck surface falls down in the form of droplets to the cooled water tank, from where it is pumped back to the cooled equipment.

Product Features

- Made of Gel coated fibre glass reinforced polyester (FRP) and resins.
- Compact & Light weight resulting in easy installation



- Jet recoil force to rotate and distribute the water & uniform water flow.
- Automatic Rotary system made of Nylon & Aluminum
- Minimizes the drift loss of water
- Applicable Round & Square type cooling towers



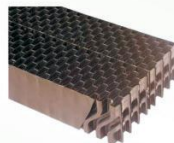
- Rigid Poly Vinyl chloride (PVC)
- Honey comb design with very large contact surface area
- PVC Fills 600 x 300 x 150 mm, Color Block
- Fills Flute height 12mm to 19mm & sheet thick 0.2 to 0.25 mm



- Sq cage induction, TEFC, IP55, Flanged with extended shaft
- Power supply of 415v/ 3ph/ 50hz
- Using standard make Hindustan/Stark motor only.



- Reduces Carry over loss of water
- Made of rigid PVC (Applicable of Square type cooling towers)
- Drift Size 600 x 600 x 130 mm



- Performance of cooling tower depends on the water distribution
- Distribute water evenly through a wide spray angle
- Applicable for Square type cooling towers



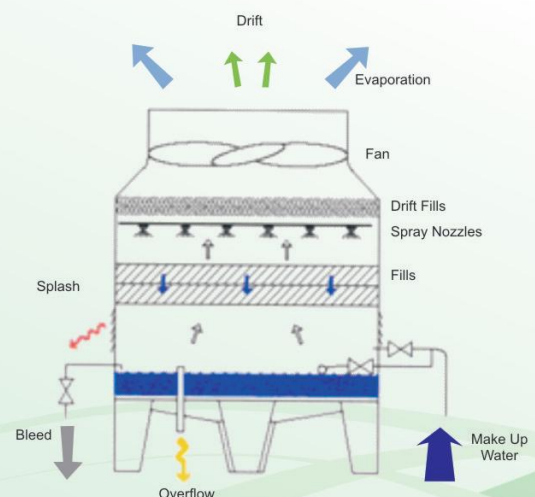
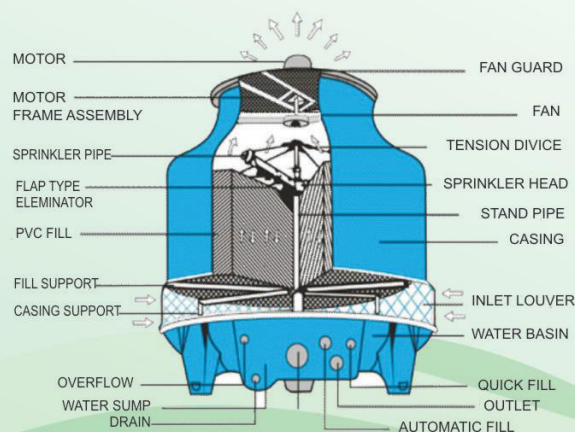
- Easy clean no damage
- It can with stand Temp more than 90 deg C
- Rigid individual no bonded



- Dynamic balanced energy efficient axial type
- Low running cost
- Lowest noise level
- Made of Aluminum alloy & Nylon 66



Schematic Diagram



Technical Specifications

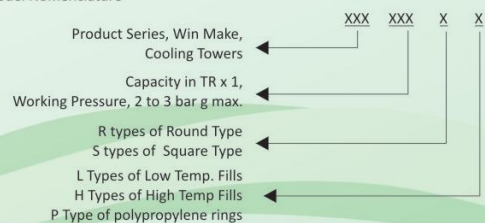
Round Cooling Tower Data Sheets

Model	Capacity		Model Variance			Motor		Dia of	In / Out	Overall Dimensions	Shipping	Operating
								Fan	Size		Weight	Weight
	TR	m3/hr	L	H	P	HP	Rpm	mm	NB		kg.	kg.
WCT 010 RL	10	6	✓	✓	✓	0.5	1440	450	1½" / 1½"	930 x 1690	80	280
WCT 020 RL	20	12	✓	✓	✓	1	960	750	2" / 2"	1380 x 1690	100	450
WCT 030 RL	30	18	✓	✓	✓	1	960	750	3" / 3"	1660 x 1860	175	540
WCT 040 RL	40	24	✓	✓	✓	1	960	850	3" / 3"	1780 x 1950	205	700
WCT 050 RL	50	30	✓	✓	✓	2	960	900	3" / 3"	1990 x 2120	260	760
WCT 060 RL	60	36	✓	✓	✓	3	960	1160	3" / 3"	1920 x 2720	330	800
WCT 080 RL	80	48	✓	✓	✓	3	960	1160	4" / 4"	2150 x 2670	375	890
WCT 100 RL	100	60	✓	✓	✓	5	960	1400	5" / 5"	2895 x 3050	615	1850
WCT 125 RL	125	75	✓	✓	✓	5	960	1400	5" / 5"	2950 x 3250	805	2300
WCT 150 RL	150	90	✓	✓	✓	5	960	1600	5" / 5"	3000 x 3950	1005	2650
WCT 200 RL	200	120	✓	✓	✓	7.5	710	1800	6" / 6"	3300 x 4230	1110	3050
WCT 300 RL	300	180	✓	✓	✓	12.5	600	2400	8" / 8"	4450 x 3900	1950	4050

Square Cooling Tower Data Sheets

Model	Capacity		Model Variance			Motor		Dia of	In / Out	Overall Dimensions	Shipping	Operating
								Fan	Size		Weight	Weight
	TR	m3/hr	L	H	P	HP	Rpm	mm	NB	L x D x H in mm	kg.	kg.
WCT 010 SL	10	6	✓	✓	✓	0.5	1440	450	2" / 2"	825 x 825 x 1500	85	210
WCT 020 SL	20	12	✓	✓	✓	0.5	1440	450	2" / 2½"	825 x 825 x 1900	90	225
WCT 030 SL	30	18	✓	✓	✓	1	960	750	2" / 2½"	1000 x 1000 x 2100	240	750
WCT 040 SL	40	24	✓	✓	✓	1	960	800	2½" / 2½"	1170 x 1170 x 2600	320	850
WCT 060 SL	60	36	✓	✓	✓	2	960	1160	3" / 3"	1400 x 1400 x 2400	350	910
WCT 100 SL	100	60	✓	✓	✓	5	960	1400	5" / 5"	1750 x 1750 x 2800	525	1550
WCT 150 SL	150	90	✓	✓	✓	7.5	960	1400	6" / 6"	2400 x 2400 x 3100	700	2100
WCT 200 SL	200	120	✓	✓	✓	7.5	710	1800	8" / 8"	2400 x 2400 x 3300	775	2250
WCT 250 SL	250	150	✓	✓	✓	10	710	1800	8" / 8"	3000 x 3000 x 3200	1110	3100
WCT 300 SL	300	180	✓	✓	✓	12.5	600	2200	8" / 8"	3000 x 3000 x 3200	1250	3300

Model Nomenclature



- Voltage range 180 to 260V for 1 Ph & 380 to 420V for 3 ph
- Rated power is the max power consumed at conditions
- Up to 55 Deg Inlet Temp - Low Temp Fill
- 55 to 85 Deg Inlet Temp - High Temp Fill

Selection Chart of Cooling Towers

ROUND COOLING TOWER

Delta T	APPROACH						
	2	3	4	5	6	7	8
4	10	11	12	13	14	15	16
6	9	10	11	12	13	14	15
8	8	9	10	11	12	13	14
10	7	8	9	10	11	12	13
12	6	7	8	9	10	11	12

Calculation :

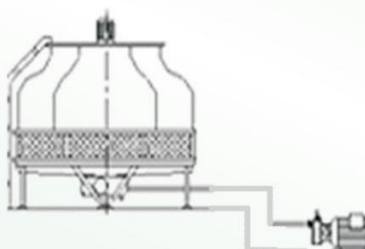
Inlet Temp Of Tower Deg C Outlet Temp Of Tower Deg C
 Wet Bulb Temp Deg C Water Flow M3/hr
 Approach Deg C Delta T Deg C

Evaporation Loss = 0.00085 x 1.8 x Flow Rate x Delta T

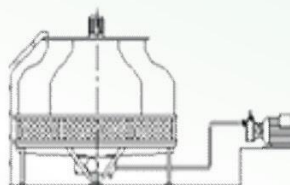
SQUARE COOLING TOWER

Delta T	APPROACH				
	4	5	6	7	8
4	13	14	15	16	17
6	12	13	14	15	16
8	11	12	13	14	15
10	10	11	12	13	14
12	9	10	11	12	13
14	8	9	10	11	12
16	7	8	9	10	11

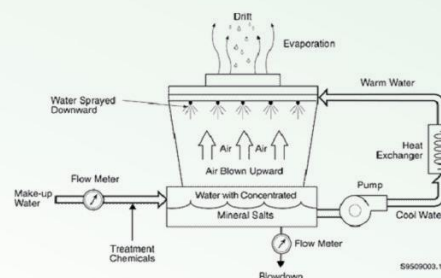
Typical Installation



Please Installation of cooling tower below
Sump outlet level only.....



Do not Place pump above
Sump outlet level



Installation Method

Application

Automobile Industry, Cement Plants, Chemical Processing Industries, Diesel Engine Generators, Distilleries / Breweries / Soft Drink Manufacturing, Electronics Industry, Food & Beverage Industry, Glass Industry, Health Care / Hospitals Induction Furnace, Paper Mills, Plastic Machineries, Pet Bottle Machines, Spinning / Knitting / Hosiery Mills, Sugar Industry. etc...



Specifications are subject to change due to up gradation in all industries

Authorized Dealer :

Manufacturers :

WIN EQUIPMENTS

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