Classik®
COOLING TOWERS

ISO 9001:2008 Certified largest cooling towers manufacturing company

Over 20,000 Cooling Towers have been installed Across the globe

2500 cooling towers are in USA, Europe, Africa, Middle East Countries and Far East Countries.

CCF Series

Round / Bottle Shape Cooling Towers

www.roundcoolingtowers.com

MEMBER

CLASSIK COOLING TOWERS

Classik®
COOLING TOWERS

About us

CLASSIK COOLING TOWERS is an ISO 9001:2008 certified, has emerged as the largest cooling towers manufacturing company at the start of the millennium and future among the top ten in India.

Classik Cooling Towers is leading global provider of Cooling Towers for almost all Industries.

Our Cooling Towers and services are dedicated to assisting customers in optimizing the performance of their processes.

Classik Cooling Towers has made a substantial investment in R&D to ensure its products meet the extensive demands of the Cooling Tower Industry.

This has resulted in the production of a world-class range of Cooling Towers, offering innovative, high performance and reliable solutions at competitive prices.

Classik Strength

Installed 20000 Cooling Towers, Over 2500 are in abroad.

Accepted by Major M&E Contractors & Consultants Globally.

We have full-fledged Manufacturing & Testing Facility at our factory to cater any tailor made Requirements within promised delivery period.

Technocrats, R&D Engineers, Dedicated Professional Service Crew join together to produce Classik Cooling Towers and meet after market services.

Classik Global Presence

Round Shape Cooling Towers

PRINCIPLE OPERATION

Round Shaped or popularly known as Bottle Shaped are designed to cool industrial re-cycled process water from temperature of 50°C to Temperature of 4 plus the prevailing Wet Bulb temperature of the region.

The tower design incorporates hot water inlet at the bottom collection sump circulated vertically to the mechanical rotary sprinkler located above the fill media. The inlet water pressure rotates the sprinkler, having extended arm pipes with orifices to disperse water uniformly over the fill media.

The fan directly coupled to the motor, during operations takes away the heat by induced draft mechanism. Air is drawn from the lower air intake area & is induced to travel through the fill media thus taking away the latent heat from the water passing through the fill media. Portion of water evaporated removes the heat from the remaining water. The warm moist air is drawn through the fan deck is discharged to the atmosphere. Cold water, collected at the collection sump is re-circulated to the source.

SALIENT FEATURES

- Capacities 10TR to 1500TR, in single cell
- Water flow 5 M^3/ Hr to 600 M^3/ Hr, in a single cell
- Delta T 4°C to 20°C, in single cell
- All structural are in HDG steel to arrest rust.
- PVC fill media with varying flute sizes of 12mm, 14 mm, 19mm, to increase the contact surface area.
- TEFC/TE, IP-55 protected 'F' Class insulated motor with extended shaft to assist outdoor applications.
- Adjustable pitch axial flow, dynamically balanced aluminium fans to improve the air exhaust at minimum power usage.
- Casings of FRP for durability and strength.
- All joints fastened with SS 304 fasteners to avoid rust.
- Uniformly in water dispersion by Rotary Sprinkler design.
- Higher air intake area to assist 100% cooling efficiency
- ABS fills for high temperature applications (80°C)
- All spare parts including PVC Fills are manufactured in house to ensure 100% back up of services

Round Cooling Towers - ILLUSTRATION DRAWING

Model CCF-RDS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1. Fan Motor	380/415/440v, 50/60Hz. TE/TEFC Class 'B' Insulation 'F'																															
2. Fan Drive	Direct Drive									Belt Drive																					Gear Driver		
3. Motor Frame	Hot Dip Galvanized Steel																															
4. Fan	Glass Reinforced Nylon									Alluminium Alloy														FRP (FIBER REINFORCED PLASTIC)								
5. Fan Guard	Not Fitted									Hot Dip Galvanized Steel																						
6. Casing	FRP																															
7. Sprinkler Head	ABS									Aluminium Alloy																						
8. Sprinkler Spray Pipe	PVC Up to 50°C (or) UPVC 51°C to 80 °C																															
9. Eliminator	Not Fitted									FRP																						
10. Tension Wire (Tie Rod)	Not Fitted									SS 304																						
11. Centre Pipe	PVC Up to 50°C (or) UPVC 51°C to 80 °C																															
12. Infill	PVC Honey comb Up to 50°C and ABS Fills From 51°C on wards																															
13. Fill Support Frame	Hot Dip Galvanized Steel																															
14. Tower Supp Frame	Upto 15 not fitted, from 19 HDG																															
15. Inlet Louver	PVC mesh																															
16. Tower Leg	FRP									Hot Dip Galvanized Steel																						
17. FRP Collection Basin	Not Fitted									FRP																						
18. Ladder	Not Fitted									Hot Dip Galvanized Steel																						
19. Drain	P P (Poly Proplyne)																															
20. Inlet / Outlet Flange	P P (Poly Proplyne)									MS Flange																						
21. Over Flow	P P (Poly Proplyne)									PVC pipe																						
22. Float Valve	PP Ball with Aluminium Stem									PP Ball with Brass Stem																						

TECHNICAL SPECIFICATION - CCF SERIES - ROUND SHAPE

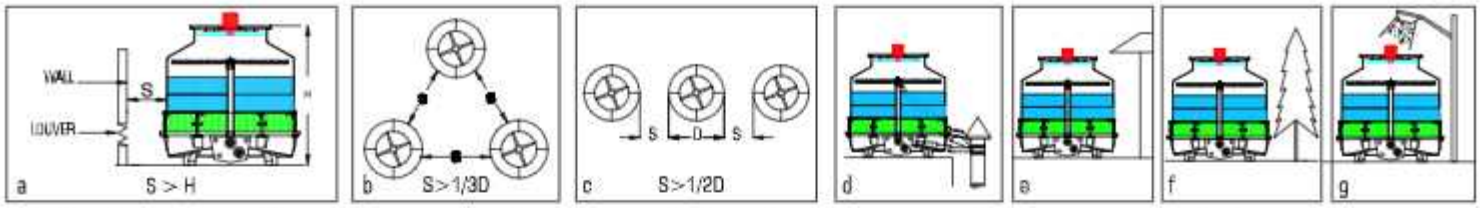
MODEL NO.	DIMENSIONS		INLET mm(in)	OUTLET mm(in)	OVER FLOW mm(in)	DRAIN mm(in)	FLOAT VALVE mm(in)	QUICK FILL mm(in)	MOTOR (HP)	FAN DIA. mm	PUMP HEAD Mtr.	APP. WEIGHT (Kg)	
	Dia. (mm)	H (mm)										Dry	Operating
CCF-RDS-01	930	1380	50 (2")	50 (2")	20 (3/4")	20 (3/4")	20 (3/4")		0.25	450	1.5	55	150
CCF-RDS-02	930	1675	50 (2")	50 (2")	20 (3/4")	20 (3/4")	20 (3/4")		0.25	450	1.5	65	165
CCF-RDS-03	1165	1730	50 (2")	50 (2")	20 (3/4")	20 (3/4")	20 (3/4")		0.5	750	1.7	85	225
CCF-RDS-04	1360	1640	50 (2")	50 (2")	20 (3/4")	20 (3/4")	20 (3/4")		0.5	750	1.8	105	260
CCF-RDS-05	1660	1705	50 (2")	50 (2")	20 (3/4")	20 (3/4")	20 (3/4")		1	740	2	130	370
CCF-RDS-06	1660	1885	80 (3")	80 (3")	20 (3/4")	20 (3/4")	20 (3/4")		1	880	2	150	390
CCF-RDS-07	1780	2035	80 (3")	80 (3")	25 (1")	25 (1")	20 (3/4")		1.5	930	2	175	450
CCF-RDS-08	1960	2400	80 (3")	80 (3")	25 (1")	25 (1")	20 (3/4")		1.5	1200	2.1	275	600
CCF-RDS-09	1960	2400	80 (3")	80 (3")	25 (1")	25 (1")	20 (3/4")		1.5	1200	2.1	337	650
CCF-RDS-10	2100	2440	100 (4")	100 (4")	40 (1 1 2")	40 (1 1 2")	20 (3/4")		2	1150	2.3	430	985
CCF-RDS-11	2100	2440	100 (4")	100 (4")	40 (1 1/2")	40 (1 1/2")	25 (1")		2	1150	2.3	445	1050
CCF-RDS-12	2700	3075	125(5")	125(5")	40 (1 1/2")	40 (1 1/2")	25 (1")	25 (1")	2	1400	3	500	1500
CCF-RDS-13	2700	3075	125(5")	125(5")	40 (1 1/2")	40 (1 1/2")	25 (1")	25 (1")	3	1400	3	525	1600
CCF-RDS-14	2900	3015	125(5")	125(5")	40 (1 1/2")	40 (1 1/2")	25 (1")	25 (1")	3	1600	3.1	550	1750
CCF-RDS-15	2900	3015	125(5")	125(5")	40 (1 1/2")	40 (1 1/2")	25 (1")	25 (1")	3	1600	3.1	585	1900
CCF-RDS-16	3450	3310	150(6")	150(6")	40 (1 1/2")	40 (1 1/2")	32 (1 1/4")	32 (1 1/4")	5	1800	3.3	825	2750
CCF-RDS-17	3450	3310	150(6")	150(6")	40 (1 1/2")	40 (1 1/2")	32 (1 1/4")	32 (1 1/4")	5	1800	3.3	875	2800
CCF-RDS-18	3670	3310	200(8")	200(8")	40 (1 1/2")	40 (1 1/2")	32 (1 1 4")	32 (1 1 4")	7.5	1800	3.3	1175	3900
CCF-RDS-19	4430	4125	200(8")	200(8")	50 (2")	50 (2")	32 (1 1/4")	32 (1 1/4")	7.5	2400	3.6	1550	4500
CCF-RDS-20	4430	4125	200(8")	200(8")	50 (2")	50 (2")	32 (1 1/4")	32 (1 1/4")	7.5	2400	3.6	1725	4750
CCF-RDS-21	4810	4025	200(8")	200(8")	50 (2")	50 (2")	32 (1 1/4")	32 (1 1/4")	10	2400	4	1900	5250
CCF-RDS-22	4810	4025	200(8")	200(8")	50 (2")	50 (2")	32 (1 1/4")	32 (1 1/4")	10	2400	4	2125	5500
CCF-RDS-23	5300	4735	250(10")	250(10")	100 (4")	50 (2")	40 (1 1/2")	50 (2")	15	3030	5	2420	6100
CCF-RDS-24	6000	4820	250(10")	250(10")	100 (4")	50 (2")	40 (1 1/2")	50 (2")	15	3400	5.3	3590	8600
CCF-RDS-25	6550	5145	250(10")	250(10")	100 (4")	50 (2")	25 (1")x2	50 (2")	20	3400	5.5	3750	11734
CCF-RDS-26	6550	5145	250(10")	250(10")	100 (4")	50 (2")	25 (1")x2	50 (2")	20	3400	5.6	3900	11850
CCF-RDS-27	6550	5145	250(10")	250(10")	100 (4")	80 (3")	25 (1")x2	50 (2")	25	3400	5.8	4100	11950
CCF-RDS-28	6800	5145	300(12")	300(12")	100 (4")	80 (3")	25 (1")x2	50 (2")	30	3600	6	4300	12100
CCF-RDS-29	6800	5145	300(12")	300(12")	100 (4")	80 (3")	25 (1")x2	50 (2")	30	3600	6.1	4400	12300
CCF-RDS-30	6800	5700	300(12")	300(12")	100 (4")	80 (3")	25 (1")x3	50 (2")	30	3600	6.3	4500	12500
CCF-RDS-31	8000	5700	300(12")	300(12")	100 (4")	80 (3")	25 (1")x3	65 (2 1/2")	40	4200	6.5	6160	14000
CCF-RDS-32	8000	5700	350(14")	350(14")	100 (4")	80 (3")	25 (1")x3	65 (2 1/2")	50	4200	7	6440	15500

APPLICATIONS

- Aluminium Die Casting Machine
- Air compressors
- A/C Plant & Cold Rooms
- Blow Moulding Machine
- Chemical Industries
- Dairy, Citrus And Other Food Processing Industries
- Distilleries And Breweries Plants
- Diesel / Gas Gensets & Megawatt Projects
- Glass Mfg. Plant
- Herbal, Aromatics & extraction plants
- Industries Heat Process
- Oil Refineries
- Plastic Injection Moulding Machine
- PVC Pipes Manufacturing Plant
- Soap / Cosmetic Mfg. Industries
- Steel Factory And Foundry

INSTRUCTION FOR INSTALLATION OF COOLING TOWERS

LOCATION SELECTION



a) Roof or other open places with free air supply are the best site for cooling tower

b) Minimum space for cooling tower begin near the enclosure

c) In case of multiple in line perpendicular installation the air flow direction is recommended

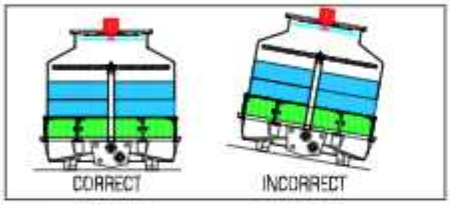
d. Avoid places where corrosive gases exit , such as chimneys .

e. Keep away from hot places such as boiler kitchens , etc.,

f. Keep away from smoke and dusty yards.

g. Keep away from high voltage line or transformer

POSITION

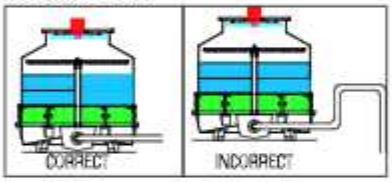


a. See that the piping can be carried out easily .

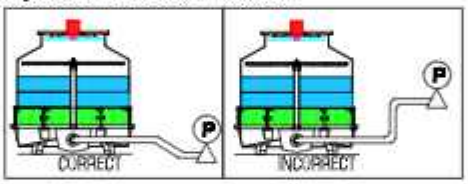
b. Be sure to place the tower vertically , as uneven sprinkling will lower the cooling efficiency .

PIPING

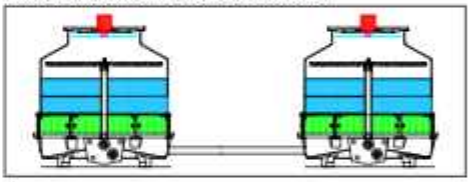
The inlet and outlet pipes must have a downward installation and be lower than the pipe connection of the water sump . (see picture below);



The pipe should be the same size as the pipe connection on the water sump . Smaller one will lower the cooling efficiency and larger one will be a waste of material .



Twin cooling towers with one pump must also share additional equalizer between each other so that the water in both towers will have the same level (see picture below.);



High pressure flexible tubes must be used at the joints of circulating outlet and inlet , which size are over 4 inches (100m/m) , to prevent vibration transmitted from the piping , and breakage of the water basin caused by improper piping .

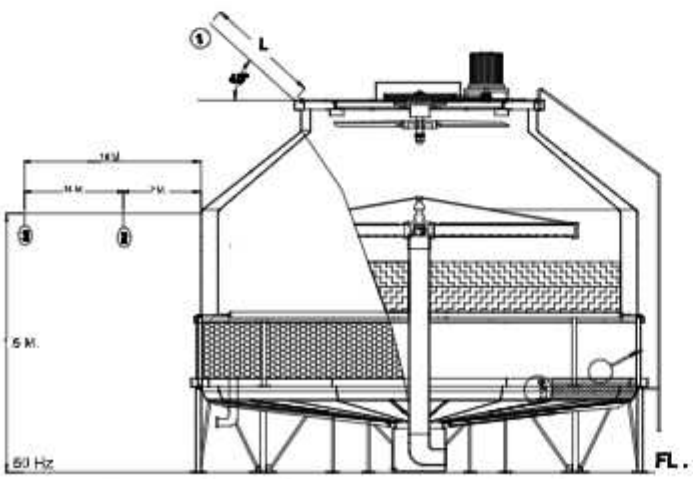
OTHERS

a. After the installation is completed , examination must be made to see that there are no tools or other objects left in the tower .

b. See the neither the piping nor the water basin leaks .

c. When the make - up water pressure is low , install either a water tank higher then the water level or a water make - up pump somewhere in the piping system to obtain the desired water pressure .

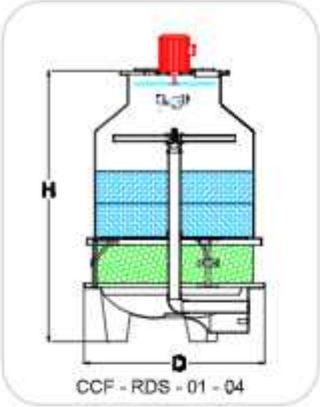
SOUND PRESSURE LEVEL OF COOLING TOWER



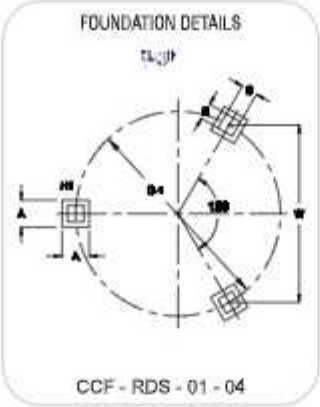
L= DIAMETER OF FAN OR 1.5 M WHICHEVER IS LARGER

MODEL	NOISE VALUE dB (A)			MODEL	NOISE VALUE dB (A)		
	1	2	3		1	2	3
CCF-RDS-01	69	56	45	CCF-RDS-17	76	71	62
CCF-RDS-02	69	63	50	CCF-RDS-18	76	71	62
CCF-RDS-03	69	66	50	CCF-RDS-19	77	72	63
CCF-RDS-04	73	63	50	CCF-RDS-20	77	72	63
CCF-RDS-05	73	67	58	CCF-RDS-21	79	74	65
CCF-RDS-06	74	67	58	CCF-RDS-22	79	74	65
CCF-RDS-07	74	68	59	CCF-RDS-23	79	74	65
CCF-RDS-08	74	68	59	CCF-RDS-24	77	72	63
CCF-RDS-09	78	68	59	CCF-RDS-25	77	72	63
CCF-RDS-10	79	72	63	CCF-RDS-26	77	72	63
CCF-RDS-11	79	73	64	CCF-RDS-27	78	74	65
CCF-RDS-12	76	73	64	CCF-RDS-28	78	74	65
CCF-RDS-13	81	68	57	CCF-RDS-29	78	74	65
CCF-RDS-14	77	71	61	CCF-RDS-30	80	75	66
CCF-RDS-15	80	75	66	CCF-RDS-31	80	75	66
CCF-RDS-16	79	73	63	CCF-RDS-32	85	80	70

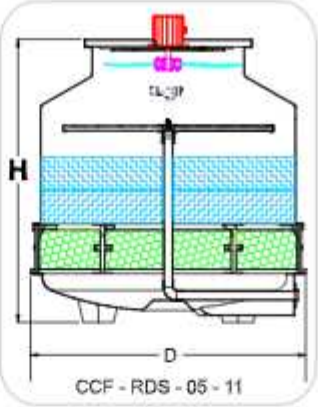
FOUNDATION DETAILS - CCF ROUND COOLING TOWER



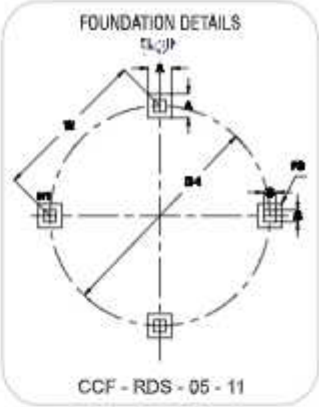
CCF - RDS - 01 - 04



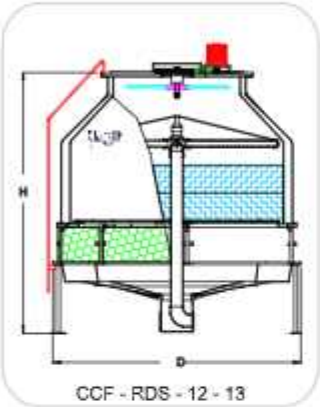
CCF - RDS - 01 - 04



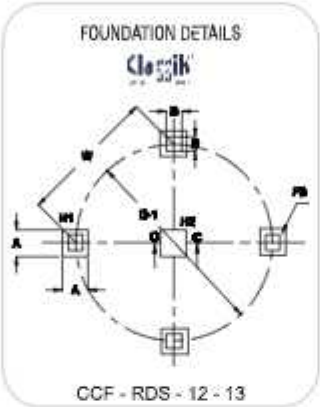
CCF - RDS - 05 - 11



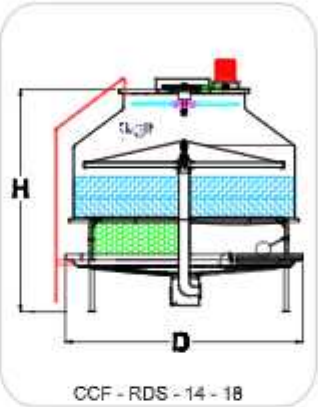
CCF - RDS - 05 - 11



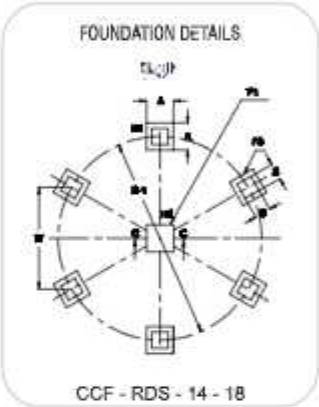
CCF - RDS - 12 - 13



CCF - RDS - 12 - 13



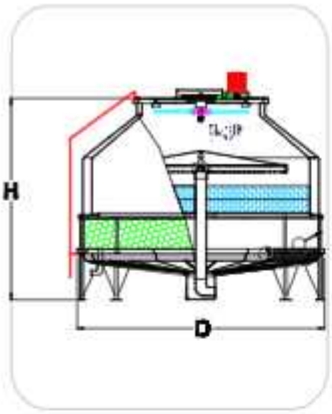
CCF - RDS - 14 - 18

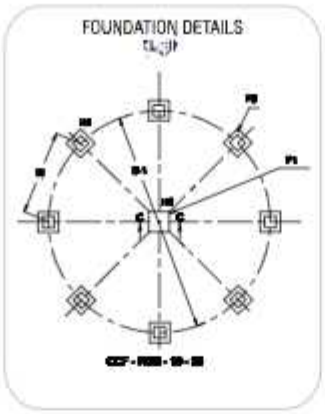


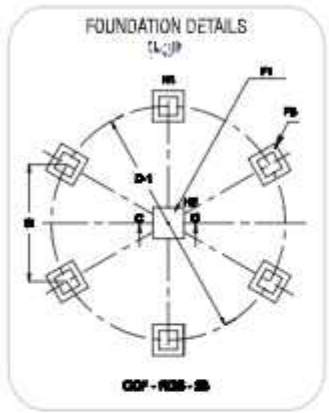
CCF - RDS - 14 - 18

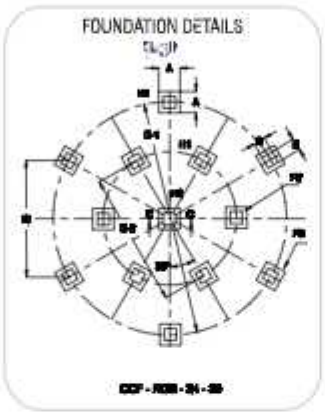
MODEL No.	DIMENSIONS (mm)										ANCHOR BOLT		
	D	H	D1	D2	W	A	B	C	H-1	H-2	SIZE (mm)	LENGTH (mm)	QTY (nos)
CCF-RDS-01	930	1380	590		510	300	150		450		12	120	3
CCF-RDS-02	930	1675	590		510	300	150		450		12	120	3
CCF-RDS-03	1165	1730	880		760	300	150		450		12	120	3
CCF-RDS-04	1360	1640	1020		880	300	150		450		12	120	4
CCF-RDS-05	1660	1705	1160		820	300	150		450		12	120	4
CCF-RDS-06	1660	1885	1160		820	300	150		450		12	120	4
CCF-RDS-07	1780	2035	1400		990	300	150		450		12	120	4
CCF-RDS-08	1960	2400	1520		1075	300	150		450		12	120	4
CCF-RDS-09	1960	2400	1520		1075	300	150		450		12	120	4
CCF-RDS-10	2100	2440	1555		1100	300	150		750		12	120	8
CCF-RDS-11	2100	2440	1555		1100	300	150		750		12	120	8
CCF-RDS-12	2700	3075	2600		1838	300	150	400	750	400	12	120	12
CCF-RDS-13	2700	3075	2600		1838	300	150	400	750	400	12	120	12
CCF-RDS-14	2900	3015	2800		1400	300	150	400	750	400	12	120	12
CCF-RDS-15	2900	3015	2800		1400	300	150	400	750	400	12	120	12
CCF-RDS-16	3450	3310	3300		1650	400	150	600	750	450	12	120	12
CCF-RDS-17	3450	3310	3300		1650	400	150	600	750	450	12	120	12
CCF-RDS-18	3600	3310	3300		1800	400	150	600	750	450	12	120	12

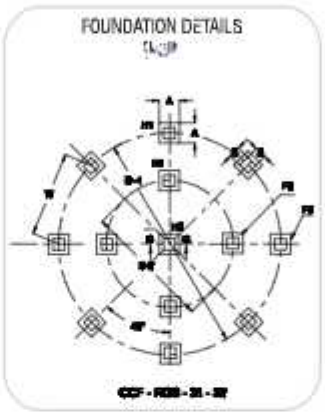
FOUNDATION DETAILS - CCF ROUND COOLING TOWER

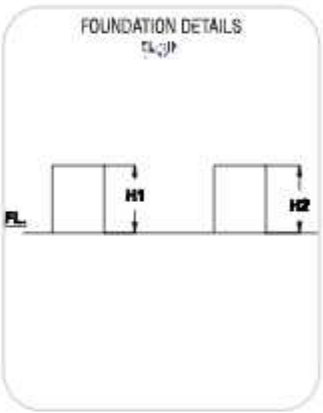












MODEL No.	DIMENSIONS (mm)										ANCHOR BOLT	
	D	H	D1	D2	W	A	B	C	H-1	H-2	SIZE (mm)	LENGTH (mm)
CCF-RDS-19	4430	4125	4300		1665	400	200	600	750	300	12	120
CCF-RDS-20	4430	4125	4300		1665	400	200	600	750	300	12	120
CCF-RDS-21	4810	4025	4700	2500	1800	400	200	600	750	300	12	120
CCF-RDS-22	4810	4025	4700	2500	1800	400	200	600	750	300	12	120
CCF-RDS-23	5300	4735	5190		2595	400	200	900	500	500	16	200
CCF-RDS-24	6000	4820	5960		2980	400	200	1000	500	500	16	200
CCF-RDS-25	6550	5145	6450	3600	2468	500	200	1000	500	500	16	200
CCF-RDS-26	6550	5145	6450	3600	2468	500	200	1000	500	500	16	200
CCF-RDS-27	6550	5145	6450	3600	2468	500	200	1000	500	500	16	200
CCF-RDS-28	6800	5145	6720	3360	2573	500	200	1000	500	500	16	200
CCF-RDS-29	6800	5145	6720	3360	2573	500	200	1000	500	500	16	200
CCF-RDS-30	6800	5700	6720	3360	2573	500	200	1000	500	500	16	200
CCF-RDS-31	8000	5700	7840	3920	3000	500	200	1000	500	500	16	200
CCF-RDS-32	8000	5700	7840	3920	3000	500	200	1000	500	500	16	200

CCF - ROUND COOLING TOWERS - COMPLETED PROJECTS

400 TR - 5 Nos
STEEL MELTING PLANT - CHENNAI (2010)

250 TR
THERMO- FORMING - ABU DHABI (2005)

60 TR - 10 Nos
SEAMLESS TOWERS - RIYADH (2013)

150 TR
HVAC APPLICATION - COLOMBO (2012)

300 TR - 3 Nos
TEXTILE SHOW ROOM - MADURAI (2010)

40 TR - 5 Nos
PLASTIC INDUSTRY - COIMBATORE (2013)

40 TR - 10 Nos
RO WATER PLANT - RIYADH - KSA (2007)

150 TR
WATER BOTTLING PLANT - KUWAIT (2009)

CLASSIK RANGE OF PRODUCTS

CXF - SERIES
CROSSFLOW
COOLING TOWERS

CXF - SERIES
TIMBER
COOLING TOWERS

CCF - SERIES
SQUARE
COOLING TOWERS

DRY
COOLING TOWERS

EVAPORATIVE
COOLING TOWERS

NATURAL DRAFT
COOLING TOWERS

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