

# SHINWA COOLING TOWER

CROSS FLOW SQUARE TYPE

**U** SERIES

**SNC-U MODEL**

- Energy saving
- Space saving
- Compact design
- High efficiency and performance





# SNC-U MODEL (CROSS FLOW SQUARE TYPE)



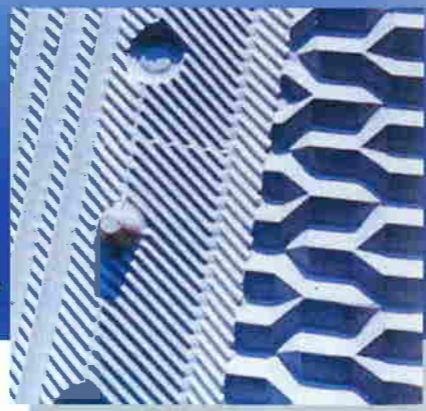
Motor set



Upper water basin



Louver blade



Fill

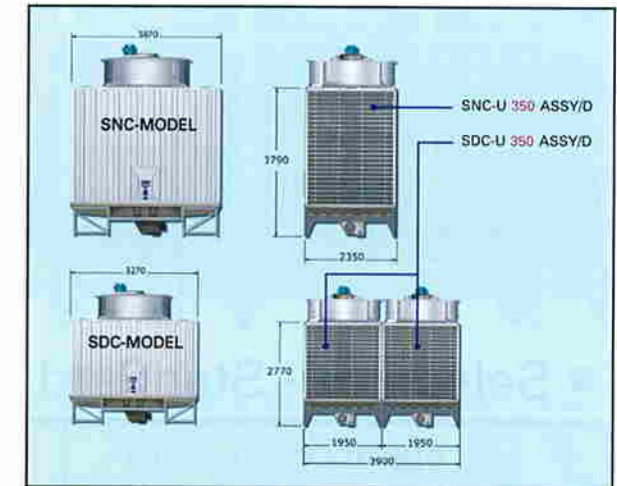


Lower water basin

## Feature

### 1 Energy Saving, Space Saving Compactness and Lightweight

“SNC-U” model is designed to install in a small space. Compare with other model, SNC model is the best one for space limited installation. New development such as high efficiency fill type eliminator combined and cone shaped fan casing are incorporated. Combination of super low noise fan type AVS reduction in installation space and volume as well as dry & wet weight by 20% in average compared with our old models.



### 2 Built - in Piping Arrangements

“U” series cooling towers are supplied with built-in piping arrangements as standard. The result is cost and space saving in the installation work.



### 3 Easier Maintenance

A new speed reducer SRS with wedge belt is compact and easy for maintenance. Also FRP lower basin is sloped for easy cleaning. (Photo shown is at the time of belt cover removed.)



### 4 Reduced Installation Time

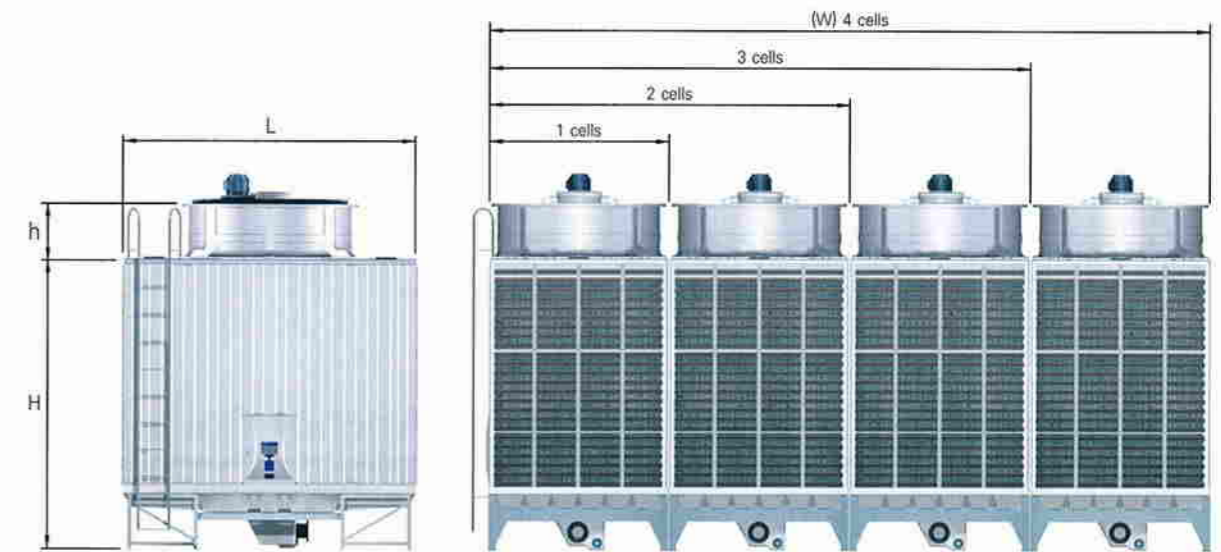
Delivery can be made in semi assembled unit form at site on request. The installation time at site can be greatly reduced by this method.





# SNC-U Series (Space saving)

For chiller other applications



## ● Selection - Standard Specifications - Noise Level

※ Other voltages such as 380, 415V are available on request

Specification		Dimensions (mm)						Piping Size (A)							Weight (kg)		Motor for fan							Noise Level dB (A)					
															Shipping	Operation	3PH x 400V x 50Hz ※							Fan 45° Dm	Louver Side H=1.5m			Casing Panel Side H=1.5m	
Inlet Temp.(°C)	37.8	35	In	Out	Ov	Dr	Ba	Ma	Q`ty	Dia mm ø	kW	P	Drv	Amp (A)			Q`ty	2 m	10 m	16 m	2 m	10 m	16 m						
Outlet Temp.(°C)	32.2	29.5													2 m	10 m								16 m	2 m	10 m	16 m		
W.B. Temp.(°C)	28.3	27	Water flow (L/min)		L	W	H	h	Model No.																				
EXTERNAL PIPING TYPE	SNC-U280ASSY	2834	1988	3570	2150	3790	645	-	150	50	50	32	32	1	1280	3380	1800	7.5	4	BD	16.3	1	70	65	57.5	53	61	54	50.5
	320ASSY	3244	2275	3870	2350	3790	715	-	150	50	50	32	32	1	1400	3750	2100	7.5	4	BD	16.3	1	71.5	66.5	59	65.5	62.5	55.5	52
	350ASSY	3622	2540	3870	2350	3790	715	-	150	50	50	32	32	1	1440	3790	2100	11.0	4	BD	21.3	1	72.5	67.5	60	66.5	63.5	66.5	63
	560ASSY	5668	3976	3570	4300	3790	645	-	150	50	50	32	32	2	2450	6650	1800	7.5	4	BD	16.3	2	72	67	59.5	56	63	56	52.5
	640ASSY	6488	4550	3870	4700	3790	715	-	150	50	50	32	32	2	2690	7390	2100	7.5	4	BD	16.3	2	74	69	61.5	58	65	58	54.5
	700ASSY	7244	5080	3870	4700	3790	715	-	150	50	50	32	32	2	2770	7470	2100	11.0	4	BD	21.3	2	75	70	62.5	59	66	59	55.5
	840ASSY	8502	5964	3570	6450	3790	645	-	150	50	50	32	32	3	3620	9920	1800	7.5	4	BD	16.3	3	73	68	60.5	57	64	57	53.5
	960ASSY	9732	6825	3870	7050	3790	715	-	150	50	50	32	32	3	3980	11030	2100	7.5	4	BD	16.3	3	74.5	70	62.5	59	66	59	55.5
	1050ASSY	10866	7620	3870	7050	3790	715	-	150	50	50	32	32	3	4100	11150	2100	11.0	4	BD	21.3	3	75.5	71	63.5	60	67	60	56.5
	1120ASSY	11336	7952	3570	8600	3790	645	-	150	50	50	32	32	4	4790	13190	1800	7.5	4	BD	16.3	4	73.5	69.5	62	58.5	65.5	58.5	55
	1280ASSY	12976	9100	3870	9400	3790	715	-	150	50	50	32	32	4	5270	14670	2100	7.5	4	BD	16.3	4	75	71	63.5	60	67	60	56.5
1400ASSY	14488	10160	3870	9400	3790	715	-	150	50	50	32	32	4	5430	14830	2100	11.0	4	BD	21.3	4	76	72	64.5	61	68	61	57.5	
INTERNAL PIPING TYPE	SNC-U280ASSD	2834	1988	3570	2150	3790	645	150	150	50	50	32	32	1	1330	3430	1800	7.5	4	BD	16.3	1	70	65	57.5	53	61	54	50.5
	320ASSD	3244	2275	3870	2350	3790	715	150	150	50	50	32	32	1	1450	3800	2100	7.5	4	BD	16.3	1	71.5	66.5	59	65.5	62.5	55.5	52
	350ASSD	3622	2540	3870	2350	3790	715	150	150	50	50	32	32	1	1480	3830	2100	11.0	4	BD	21.3	1	72.5	67.5	60	66.5	63.5	66.5	63
	560ASSD	5668	3976	3570	4300	3790	645	150	150	50	50	32	32	2	2540	6740	1800	7.5	4	BD	16.3	2	72	67	59.5	56	63	56	52.5
	640ASSD	6488	4550	3870	4700	3790	715	150	150	50	50	32	32	2	2780	7480	2100	7.5	4	BD	16.3	2	74	69	61.5	58	65	58	54.5
	700ASSD	7244	5080	3870	4700	3790	715	150	150	50	50	32	32	2	2850	7550	2100	11.0	4	BD	21.3	2	75	70	62.5	59	66	59	55.5
	840ASSD	8502	5964	3570	6450	3790	645	150	150	50	50	32	32	3	3750	10050	1800	7.5	4	BD	16.3	3	73	68	60.5	57	64	57	53.5
	960ASSD	9732	6825	3870	7050	3790	715	150	150	50	50	32	32	3	4110	11160	2100	7.5	4	BD	16.3	3	74.5	70	62.5	59	66	59	55.5
	1050ASSD	10866	7620	3870	7050	3790	715	150	150	50	50	32	32	3	4220	11270	2100	11.0	4	BD	21.3	3	75.5	71	63.5	60	67	60	56.5
	1120ASSD	11336	7952	3570	8600	3790	645	150	150	50	50	32	32	4	4960	13360	1800	7.5	4	BD	16.3	4	73.5	69.5	62	58.5	65.5	58.5	55
	1280ASSD	12976	9100	3870	9400	3790	715	150	150	50	50	32	32	4	5440	14840	2100	7.5	4	BD	16.3	4	75	71	63.5	60	67	60	56.5
1400ASSD	14488	10160	3870	9400	3790	715	150	150	50	50	32	32	4	5590	14990	2100	11.0	4	BD	21.3	4	76	72	64.5	61	68	61	57.5	

L=Length , W=Width , H=Height , h=Fan Casing Height

In=Water inlet, Out=Water outlet, Ov=Over flow, Dr=Drain, Ba=Automatic make-up, Ma=Manual make-up, Drv=Driving method, BD=Belt drive, Amp=Rated current, Dm=Fan diameter point



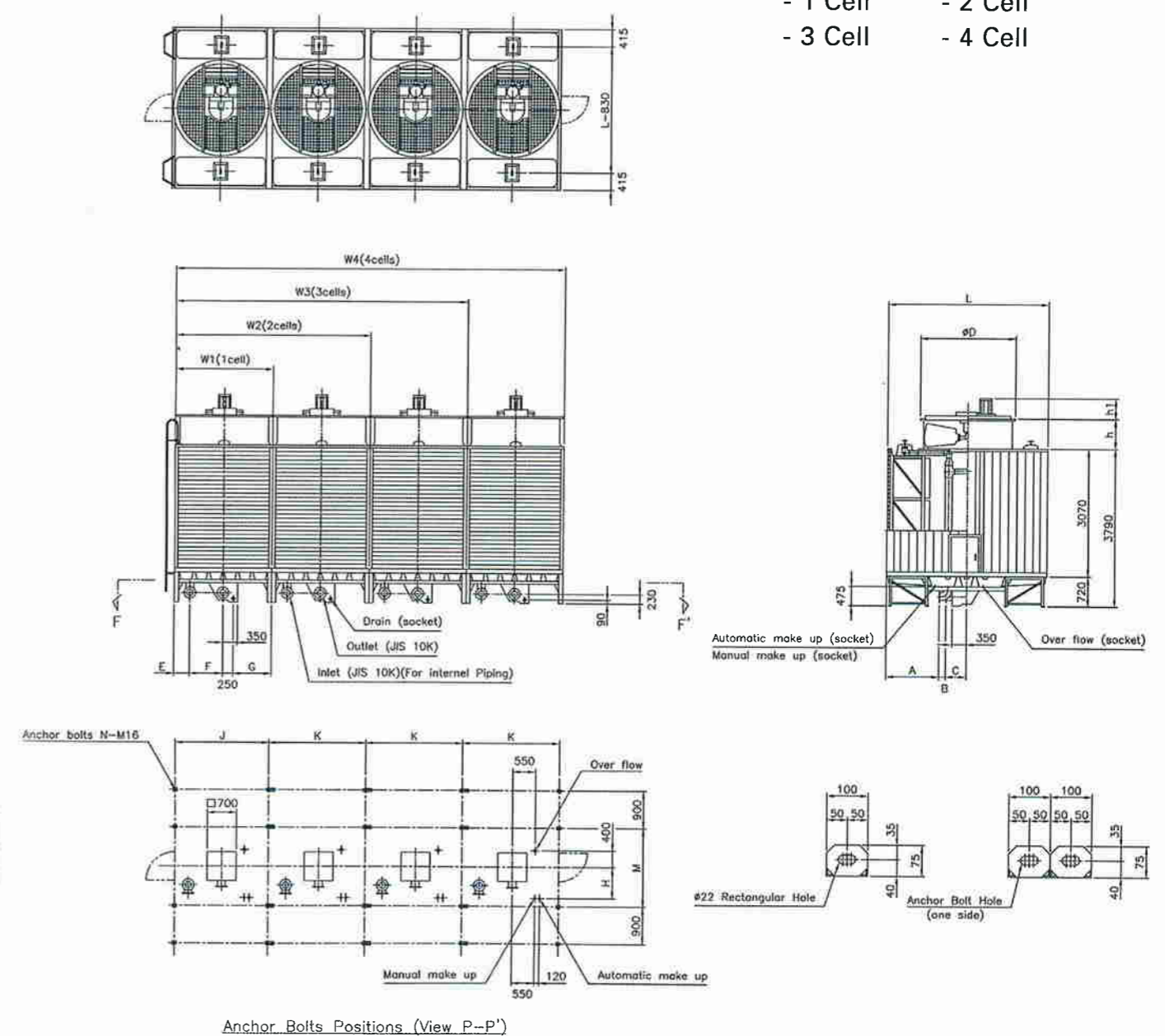
# SNC-U Series (Space saving)

## ● Schematic Drawings - Piping & Anchor Bolts Positions

Specification Model	Cell (s)	Dimensions (mm)							Pipe Positions (mm)								Bolts Position (mm)			Bolt Q'ty N
		L	Width				∅D	h	h1	A	B	C	E	F	G	H	J	K	M	
			W1	W2	W3	W4														
SNC-U 280 ASSY ASSD	1	3570	2150	-	-	-	2000	645	420	1125	160	500	375	700	825	600	2050	-	1600	8
320 ASSY ASSD		3870	2350	-	-	-	2300	715	440	1275	160	500	375	800	925	750	2250	-	1900	8
350 ASSY ASSD		3870	2350	-	-	-	2300	715	531	1275	160	500	375	800	925	750	2250	-	1900	8
560 ASSY ASSD	2	3570	2150	4300	-	-	2000	645	420	1125	160	500	375	700	825	600	2050	2150	1600	12
640 ASSY ASSD		3870	2350	4700	-	-	2300	715	440	1275	160	500	375	800	925	750	2250	2350	1900	12
700 ASSY ASSD		3870	2350	4700	-	-	2300	715	531	1275	160	500	375	800	925	750	2250	2350	1900	12
840 ASSY ASSD	3	3570	2150	4300	6450	-	2000	645	420	1125	160	500	375	700	825	600	2050	2150	1600	16
960 ASSY ASSD		3870	2350	4700	7050	-	2300	715	440	1275	160	500	375	800	925	750	2250	2350	1900	16
1050 ASSY ASSD		3870	2350	4700	7050	-	2300	715	531	1275	160	500	375	800	925	750	2250	2350	1900	16
1120 ASSY ASSD	4	3570	2150	4300	6450	8600	2000	645	420	1125	160	500	375	700	825	600	2050	2150	1600	20
1280 ASSY ASSD		3870	2350	4700	7050	9400	2300	715	440	1275	160	500	375	800	925	750	2250	2350	1900	20
1400 ASSY ASSD		3870	2350	4700	7050	9400	2300	715	531	1275	160	500	375	800	925	750	2250	2350	1900	20

### SNC-U280~1400ASSY/ASSD

- 1 Cell
- 2 Cell
- 3 Cell
- 4 Cell

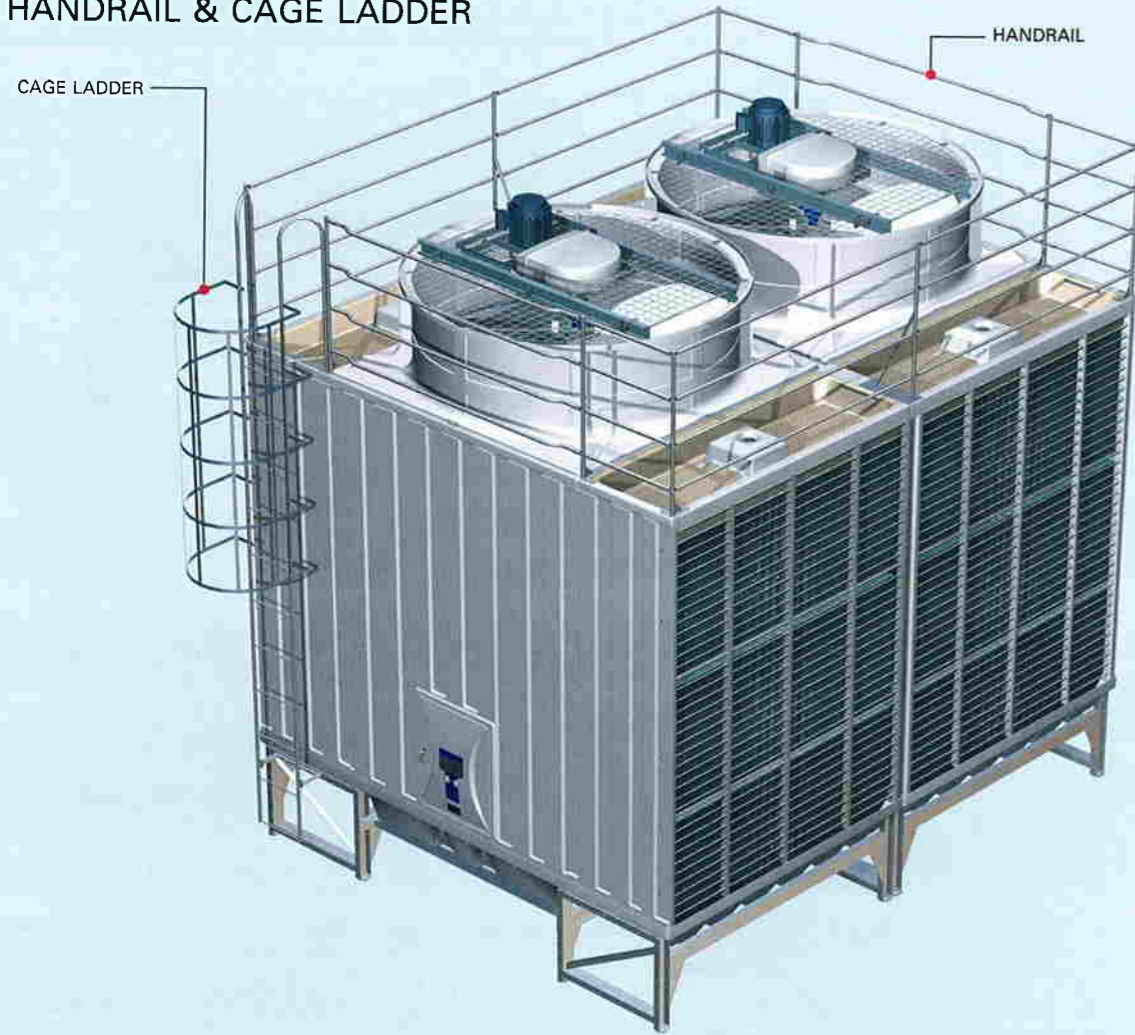


The above drawing shown is internal piping type (ASSD)



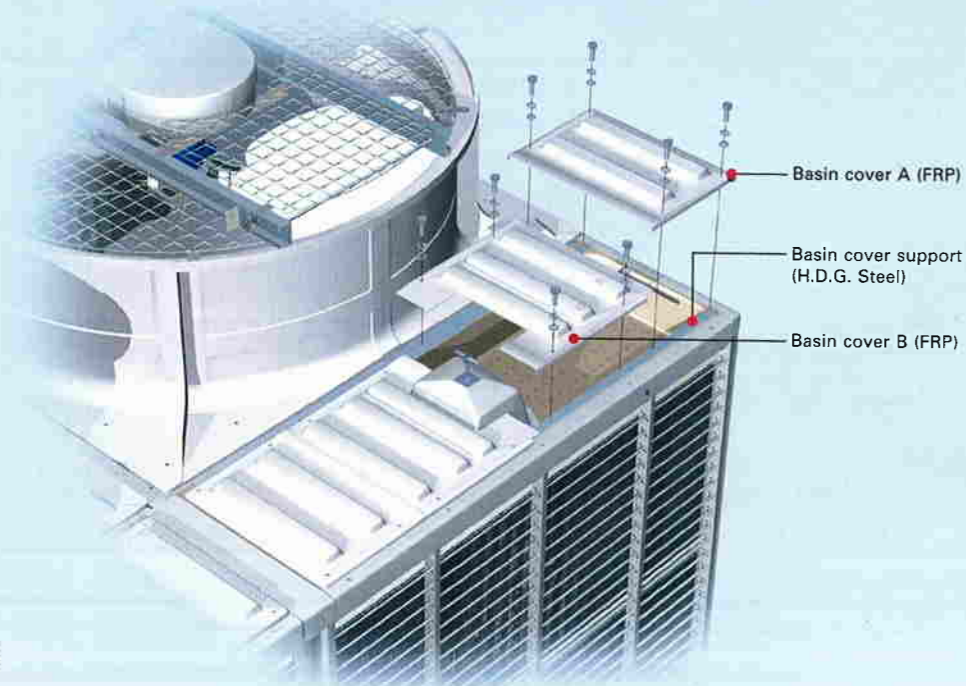
# U - Series optional parts

## HANDRAIL & CAGE LADDER



## UPPER WATER BASIN COVER (F.R.P. or H.D.G. Steel)

- Protect from invasion of dust into the upper basin
- interrupt sunlight which is causing algae glowth



## OTHER OPTION PARTS

1. F.R.P. Duct (Straight , Elbow)
2. Partition
3. Additional eliminator (P.V.C.)

**EBARA SHINWA** gives answers to any of your request with our variety of selection



Cross flow type (SLC)



Closed circuit type (MXC)



Counter flow type (SCC)



Counter flow type (SBC)



Cross flow type (SNC-R)





## Precautions for safety

Cooling towers described in this catalog are of our standard specifications.

### ■ Before use

- Before use, read the "Instruction Manual" carefully and use the towers correctly

### ■ Before installation

- Request installation from the distributor or professional agency. Otherwise, improper installation work may cause toppling, water leakage, electric shocks or fire which will endanger operations.
- Make sure to use extra-cost options such as an electric heater designated by us, request installation from the distributor or professional agency.
- Otherwise, improper installation work might cause toppling, water leakage, electric shocks or fire which will endanger operations. Space is required for maintenance work around the machine. lack of space may obstruct safety work and cause injuries.

### ■ Location for use

- Do not install in places where combustible gases leak or flammables exist.
- Fire may occur in places where flammable gases are generated, flow in or are retained, and carbon fibers are floated.

### ■ Maintenance and inspection

- Periodic maintenance and inspection is required other than inspections for daily operation.
- Improper maintenance and inspection may cause a fire, electric shocks and burns.
- As maintenance and inspection requires special skills, consult manufacturer or distributor.

### \*Notice for water quality control

If the circulating water is left as it is, slime deposits in the water bath and piping will develop. The slime is formed from many kinds of algae and fungi, particularly, metabolic products from algae sometimes help fungi grow. Disease-causing bacteria among bacteria may also exist, therefore, please be advised to clean or control the water quality at least once a month to prevent algae from forming.

● Your Contact (Agent)



**EBARA SHINWA LTD.**

Specification listed in this brochure are subject to change without notice due to technical improvement on our products