



# LIANG CHI INDUSTRY ( THAILAND ) CO., LTD.

## COUNTER FLOW INDUCED DRAFT LBC TYPE COOLING TOWER SPECIFICATION

DATE :  
 TOWER MODEL NO. : LBC - T - 100  
 NO. OF SETS : 1

### DESIGN & OPERATING CONDITIONS

WATER FLOW RATE. : 1,112 LPM.  
 HOT WATER TEMP. : 37 °C  
 COLD WATER TEMP : 32 °C  
 AMB. WET BULB TEMP. : 28 °C  
 FAN B.H.P. : 2.5 BHP  
 TOWER PUMP HEAD : 2.5 M  
 DRIFT LOSS OF WATER FLOW RATE : 0.2 %  
 EVAPORATION LOSS OF WATER FLOW RATE : 0.83 %  
 DESIGN WIND LOAD : 150 Kg / M<sup>2</sup>

### STRUCTURAL DETAILS

OVERALL DIMENSION : 2750 MM  
 DRY WEIGHT : 403 Kg  
 OPERATING WEIGHT PER TOWER : 1073 Kg

### CONSTRUCTION

TOWER SUPPORTER FRAME ASS'Y : F.R.P.  
 CASING : F.R.P.  
 CASING SUPPORTOR : H.D.G.S.  
 COLD WATER BASIN : F.R.P.  
 FILLING : P.V.C.  
 FILLING SUPPORTOR : H.D.G.S.  
 FAN GUARD : H.D.G.S.  
 MECHANICAL EQUIPMENT SUPPORTOR : H.D.G.S.  
 INLET LOUVER : P.V.C.  
 BOLTS,NUTS & WASHERS : C.P.S.

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<input type="checkbox"/>	APPROVED
<input type="checkbox"/>	OTHER.....
DATE :	
TECHNIC BY :	



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### WATER DISTRIBUTION

STAND PIPE : P.V.C.  
 SPRINKLER HEAD : A.A.  
 MODEL : LSH - 100  
 SPRINKLER PIPE : P.V.C.

### MECHANICAL EQUIPMENTS

#### FAN UNIT

NO. OF UNIT : 1 UNIT / SET  
 TYPE : AXIAL FLOW  
 MODEL : LSF-150  
 MANUFACTUROR : LIANG CHI IND.CO.,LTD.  
 DIAMETER : 1470 MM  
 NO. OF BLADES : 4  
 FAN SPEED : 700 RPM  
 TIP SPEED : 53.8 M/S  
 BLADE MATERIAL : A.A.  
 HUP MATERIAL : A.A.  
 AIR VOLUME : 700 M<sup>3</sup> / MIN/SET

#### FAN MOTOR

NO. OF UNIT : 1 UNIT / SET  
 TYPE : TEFC  
 INSULATION : CLASS F IP55  
 MANUFACTUROR : LIANG CHI  
 SPEED : 700 RPM  
 RATED H.P : 3 H.P \* 8P  
 POWER SOURCE ( VOLT / PHASE / HZ ) : 380 / 3 / 50

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<u>PIPING CONNECTION</u>		SIZE	Q'TY / SET
WATER INLET	:	4 B ( 100 A )	1
WATER OUTLET	:	4 B ( 100 A )	1
AUTO FILL	:	1 B ( 25 A )	1
QUICK FILL	:	1 B ( 25 A )	1
OVER FLOW	:	1 B ( 25 A )	1
DRAIN	:	2 B ( 50 A )	1

### REMARK

F.R.P : FIBERGLASS REINFORCE PLASTIC

H.D.G.S : HOT DIP GALVALNIZED STEEL

A.A. : ALUMINIUM ALLOY

C.P.S. : CHROMATED - PLATING STEEL

DESIGNED : ..... 

CHECK : ..... 

APPROVE : ..... 

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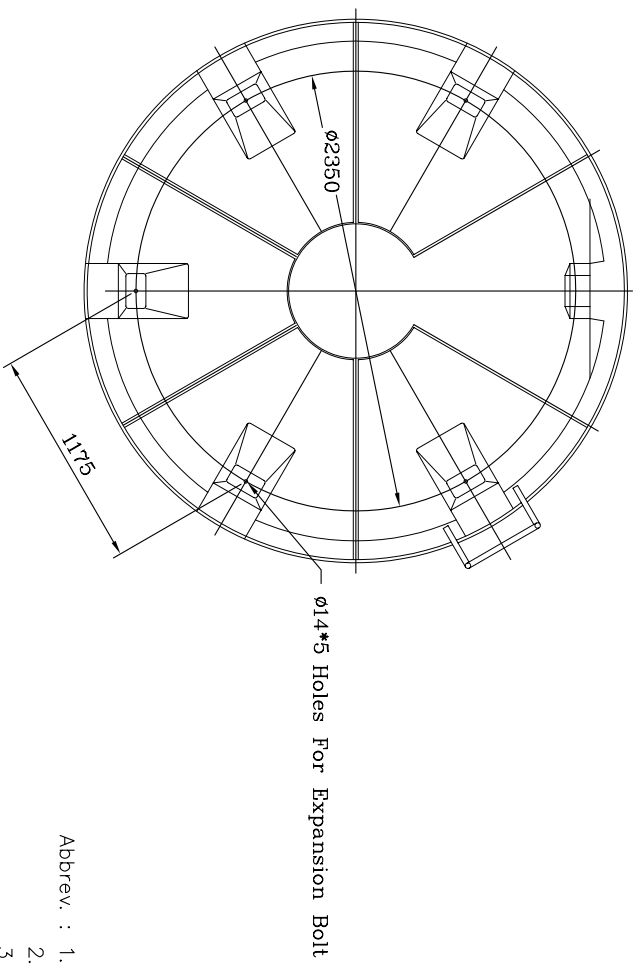
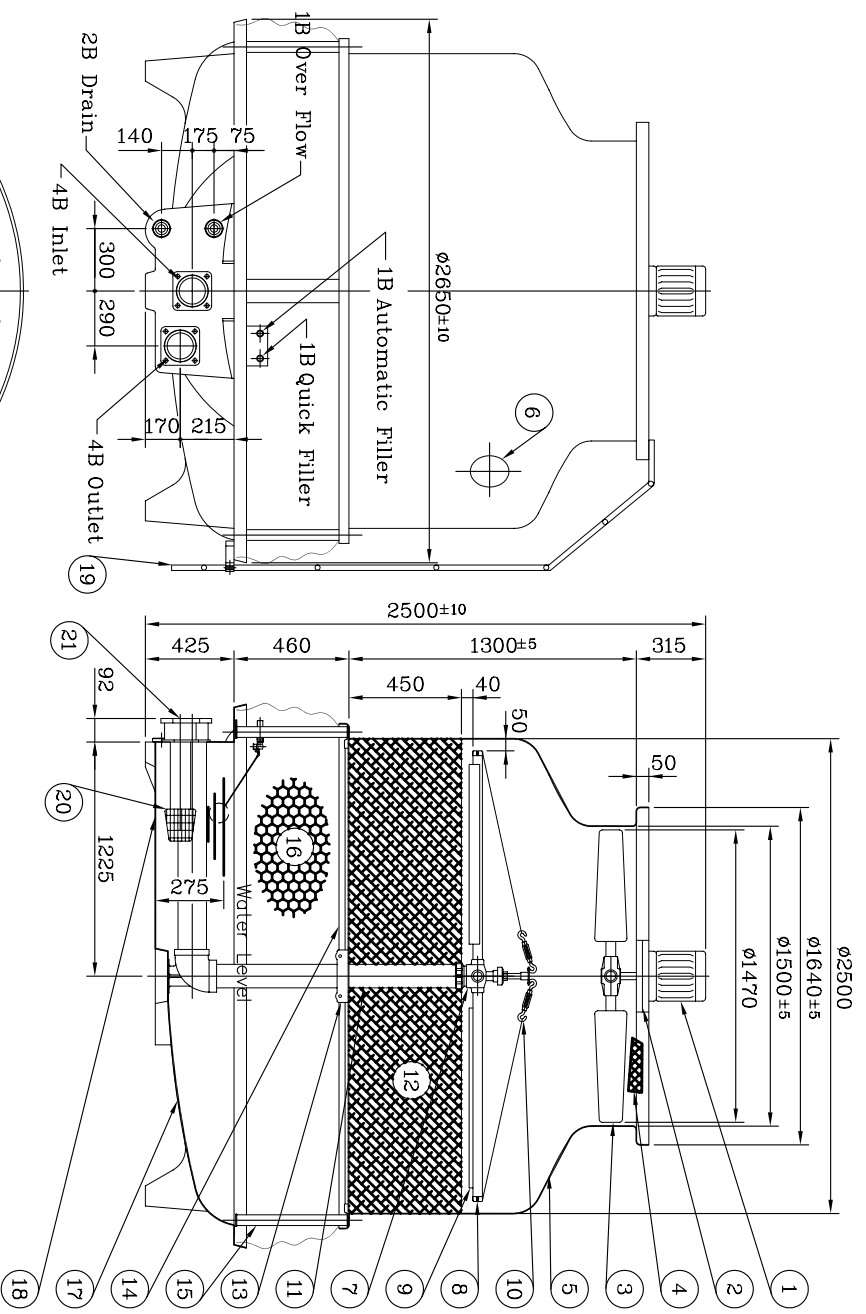
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DATE :

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 DATE: ....  
 TECHNIC BY: ..

Description	M.T	Specification	Q'ty
1 Fan Motor		3HP*8P	1 PCS
2 Motor Framework Ass'y	H.D.G.S		1 PCS
3 Fan	A.A.	LSF-150	1 SET
4 Fan Guard	H.D.G.S.		1 SET
5 Casing	F.R.P.		6 PCS
6 Hand Hole	E.V.A.		1 PCS
7 Sprinkler Head	A.A.	LSH-100	1 PCS
8 Sprinkler Pipe	P.V.C.		4 PCS
9 Eliminator	P.V.C.		4 PCS
10 Tension Device	P.V.C.		4 SET
11 Stand Pipe	P.V.C.		1 PCS
12 Filling	P.V.C.		1 SET
13 Stopper or Column	A.A.		1 SET
14 Filling Supporter	H.D.G.S		1 SET
15 Casing Supporter	H.D.G.S		6 PCS
16 Inlet Louver	P.V.C.		1 SET
17 Water Basin	F.R.P.		5 PCS
18 Water Sump	F.R.P.		1 PCS
19 Ladder	H.D.G.S		1 PCS
20 Strainer	P.E.		1 PCS
21 Flange	H.D.G.S		2 PCS

Drain	50A ( 2 B )	Over Flow	25A( 1 B )
Outlet	100A ( 4 B )	quick Filler	25A( 1 B )
Inlet	100A ( 4 B )	Automatic filler	25A( 1 B )
Pipe Connections			
Dry Weight	403 kgs	Operating Weight	1,073 kgs
Loading Data			
Ambient Wetbulb	: 28 °C	Air Volume	: 700 M <sup>3</sup> /MIN
Outlet Water Temp	: 32 °C	Water Flow	: 1,112 LPM
Inlet Water Temp	: 37 °C	Cooling Capacity	: 333,600 Kcal/HR

Design Condition

REV.	DATE	DWG BY	APP.	NOTE
		LBC-T-100		
TITLE				
OUTLINE VIEW				
APP.	K.Somanas	DESIGN	Annot	
CHECK	SURASAK	DWG BY.	Annot	
LIANG CHII INDUSTRY (THAILAND) CO., LTD. 223 Moo 9 Tab-Yaolad-KRABANG BANGKOK 10520 (NUM KAI INDUSTRIAL ZONE LUANG-PAENG RD.)				LBC-T-100-01 DWG-NO

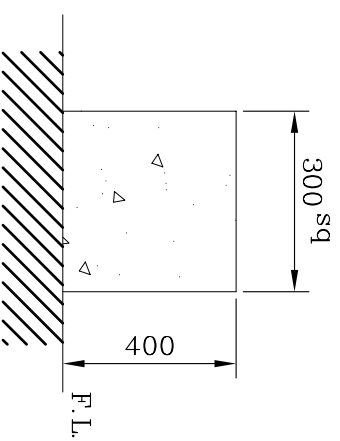
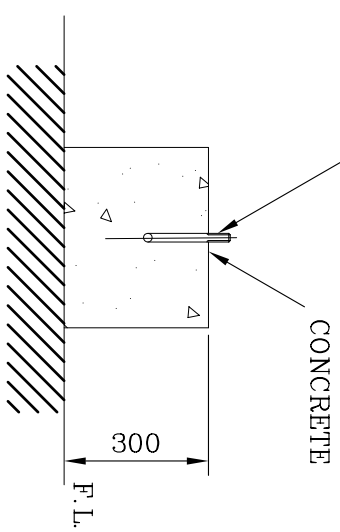
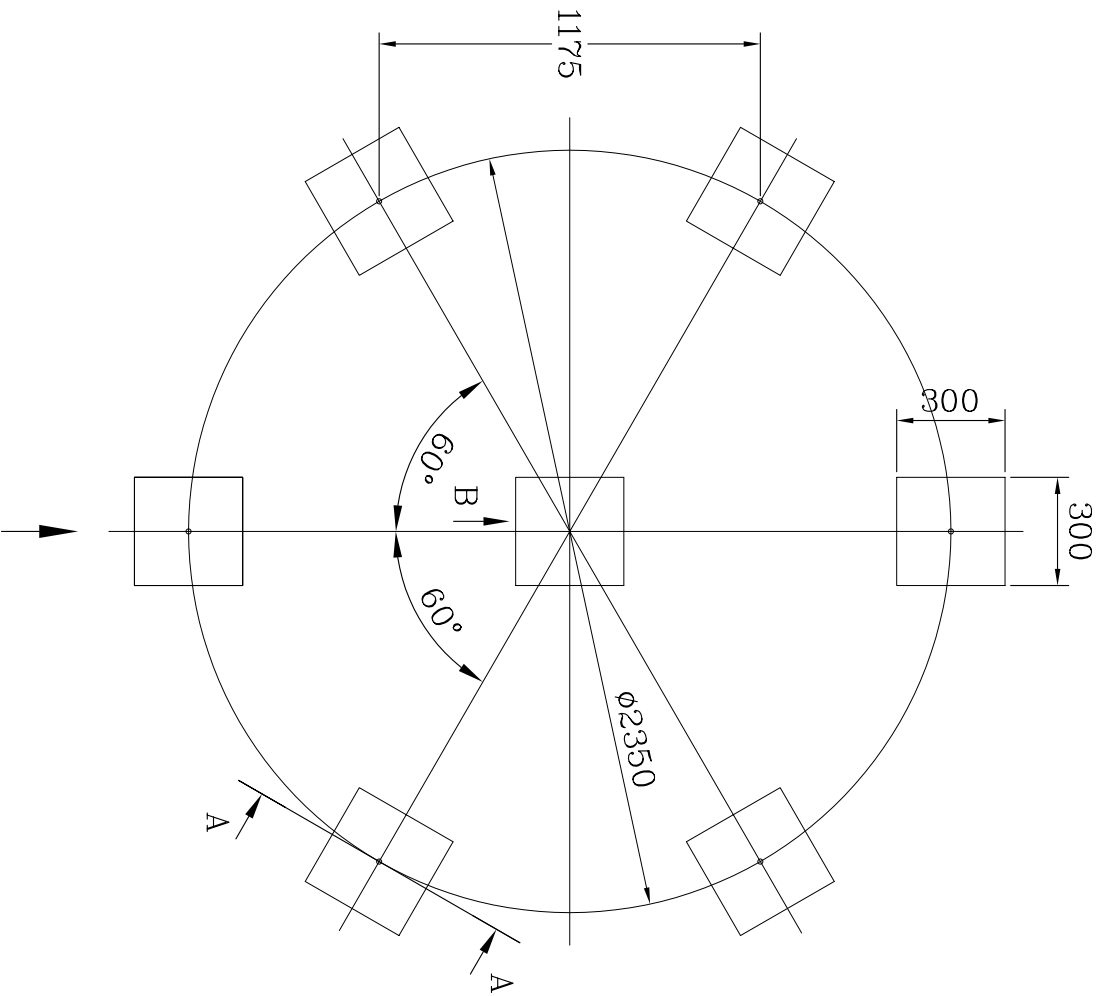
Abbrev. : 1. H.D.G.S.:Hot Dip Galvanized Steel

2. A.A. : Aluminum Alloy

3. S.T.S :Stainless Steel 304

4. F.R.P. :Fiberglass Reinforced Plastic

EXPANSION BOLT ( BY LIANG CHI )



REMARK :

1. THIS FOUNDATION DRAWING IS PROVIDED FOR END USER'S REFERENCE.
2. COOLING TOWER DOES NOT INCLUDE FOUNDATION
3. THE LEVEL TOLERANCE OF FOUNDATION IS  $\pm 2$  mm.
4. THE HEIGHT OF FOUNDATION EXCLUDES THERMAL ISOLATOR AND WATER PROOF.
- \* 5. EXPANSION BOLT & RUBBER PAD SHALL BE FURNISHED BY LIANG CHI  
( PLEASE DON'T PREPARE HOLE OF EXPANSION BOLT BEFORE INSTALLATION )

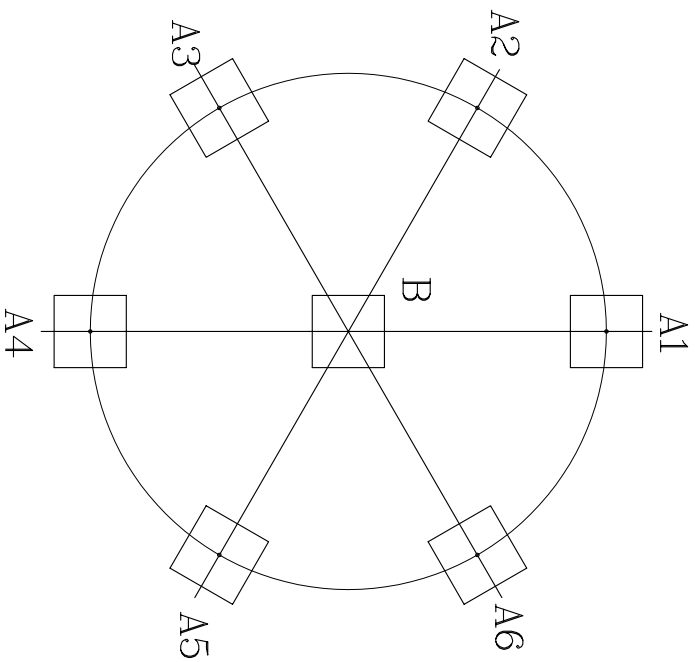
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 OTHER.....

DATE: \_\_\_\_\_  
TECHNIC BY: \_\_\_\_\_

Water Inlet

REV.	DATE	DWG BY	APP.	NOTE
LBC-T-100				
Concrete Foundation				
APP.	K.Somanas	DESIGN	Annat	
CHECK	SURASAK	DWG BY.	Annat	
LIANG CHI INDUSTRY (THAILAND) CO., LTD. (NUM KRAL INDUSTRIAL ZONE LUANG-PAENG RD.)				
				MM
				DWG-NO
				LBC-T-100-02



UNIT : KG.

LBC-T-100	A1 = A2 = ... = A6	B
	83	575

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 OTHER.....  
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 TECHNIC BY : .....

REV.	DATE	DWG BY	APP.	NOTE
LBC-T-100				
Loading Data				
APP.	K.Somanas	DESIGN	Annat	MM
CHECK	SURASAK	DWG BY.	Annat	DWG-NO
LIANG CHI INDUSTRY (THAILAND) CO., LTD. 223 Moo 9 TAB-YAO LAD-KRABANG BANGKOK 10520 (NUM KRAI INDUSTRIAL ZONE LUANG-PAENG RD.)				LBC-T-100-03