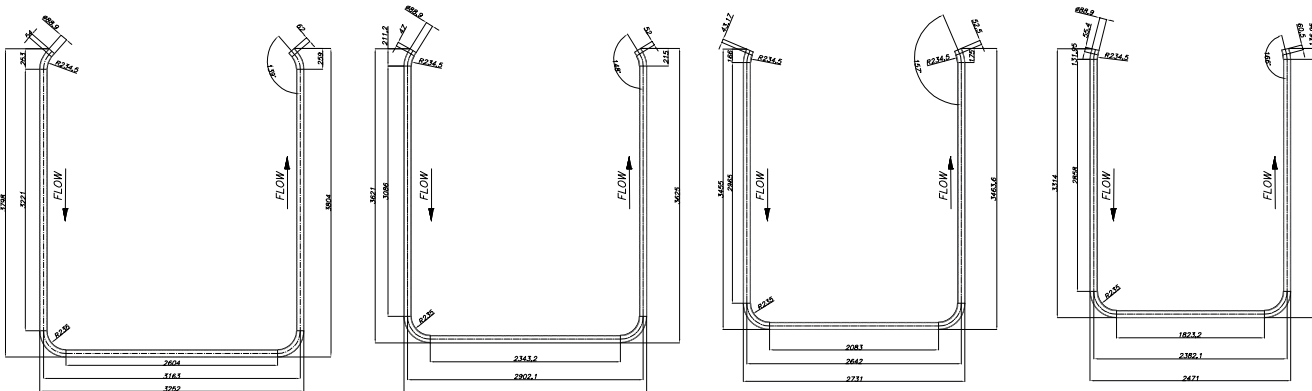


TOLERANCES & FITS: MACHINED SURFACES DIN 7168"MED" WELDED CONSTRUCTION ACC. TO "AWS"	BREAK ALL MACHINED SHARP EDGES BY 1x45° ALL DIM IN MILLIMETER
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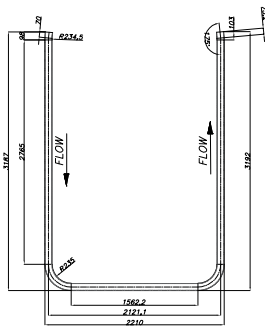


DETAIL ITEM 1

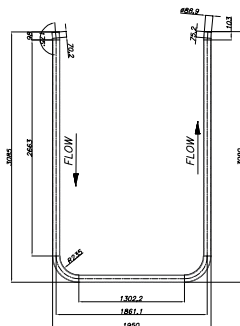
DETAIL ITEM 2

DETAIL ITEM 3

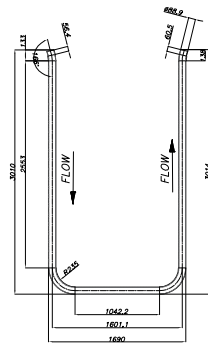
DETAIL ITEM 4



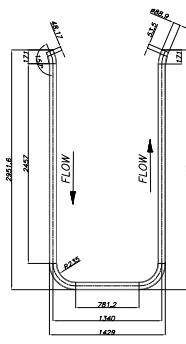
DETAIL ITEM 5



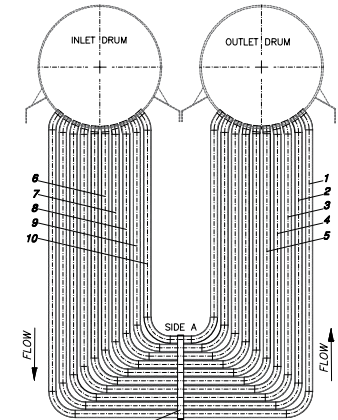
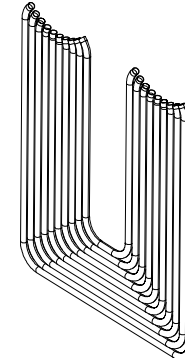
DETAIL ITEM 6



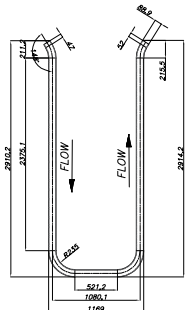
DETAIL ITEM 7



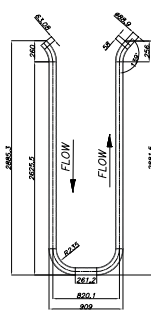
DETAIL ITEM 8



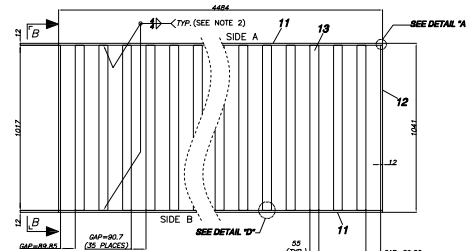
GENERAL ARRANGEMENT



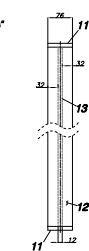
DETAIL ITEM 9



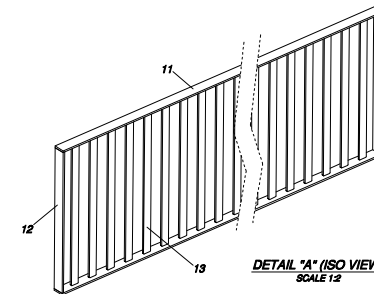
DETAIL ITEM 10



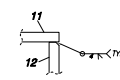
DETAIL "A" (GUIDE)
SCALE 1:2



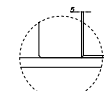
VIEW "B-B"
SCALE 1:4



DETAIL "A" (ISO VIEW)
SCALE 1:2



DETAIL "C"
SCALE 1:10



DETAIL "D"
SCALE 1:5

BILL OF MATERIAL						
NO. ITEM	QTY	DESCRIPTION	MATERIAL	WEIGHT (kg)	REMARKS	
				UNIT	TOTAL	
1	31	PIPE ϕ 88.9 O.D. x 3.05 THK. x 10438 LG	SB 407-800HT	76.15	2360	ANSI B36.19
2	31	PIPE ϕ 88.9 O.D. x 3.05 THK. x 9804 LG	SA 312W-310H	65.2	2021.2	ANSI B36.19
3	31	PIPE ϕ 88.9 O.D. x 3.05 THK. x 9210 LG	SA 312W-310H	61.3	1900.3	ANSI B36.19
4	31	PIPE ϕ 88.9 O.D. x 3.05 THK. x 8669 LG	SA 312W-310H	57.6	1785.6	ANSI B36.19
5	31	PIPE ϕ 88.9 O.D. x 3.05 THK. x 8164 LG	SA 312W-310H	54.3	1683.3	ANSI B36.19
6	31	PIPE ϕ 88.9 O.D. x 3.05 THK. x 7700 LG	SA 312W-310H	51	1581	ANSI B36.19
7	31	PIPE ϕ 88.9 O.D. x 3.05 THK. x 7279 LG	SA 312W-310H	48.4	1500.4	ANSI B36.19
8	31	PIPE ϕ 88.9 O.D. x 3.05 THK. x 6898 LG	SA 312W-310H	46	1426	ANSI B36.19
9	31	PIPE ϕ 88.9 O.D. x 3.05 THK. x 6560 LG	SA 312W-310H	43.5	1348.5	ANSI B36.19
10	31	PIPE ϕ 88.9 O.D. x 3.05 THK. x 6263 LG	SA 312W-310H	41.6	1290	ANSI B36.19
HOT AIR TUBES GUIDE - DETAIL A						
11	2	PL 12 x 76 x 4484	SA 240-304H	32	64	
12	2	PL 12 x 76 x 1017	SA 240-304H	7.3	14.6	
13	30	PL 12 x 55 x 1017	SA 240-304H	5	150	

- ALL DIMENSIONS ARE IN MILLIMETER
- WELD SIDE B OF PART 9 TO PART 7, AFTER ALL TUBES ARE WELDED TO DRUMS AND THE REST OF THE GUIDES ARE INSERTED BETWEEN TUBES

Rev.	DATE	REVISION DETAILS	DRAWN	CHEK.	APP.
A5	1401.08.10	ISSUED FOR APPROVAL	S.A.	A.R.	M.R.
A4	1401.07.12	ISSUED FOR APPROVAL	S.A.	A.R.	M.R.
A3	1401.05.01	ISSUED FOR APPROVAL	S.A.	A.R.	M.R.
A2	1401.02.31	ISSUED FOR APPROVAL	S.A.	A.R.	M.R.
A1	1401.01.20	ISSUED FOR APPROVAL	S.A.	A.R.	M.R.

VENDOR:

CLIENT:

Golgozar Iron & Steel Development Company



DRAWING TITLE:

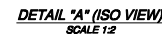
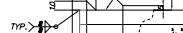
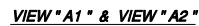
Hot Air Bundle-Tube

WEB SITE :	DWG No. :	Project	Dep.	Serial	Size	Rev.	Sheet
WWW.GOLGOZAR.COM	GD-14079-21A-B-01-01					A	5

Scale: AS SHOWN

UNLESS OTHERWISE SPECIFIED

~ (V) ~ SURFACE FINISH DIN 3141 RANGE 2 TOLERANCES & FITS: MACHINED SURFACES DIN 7168 "MED" WELDED CONSTRUCTION ACC. TO "AWS"	3RD ANGLE PROJECTION BREAK ALL MACHINED SHARP EDGES BY 1x45° ALL DIM IN MILLIMETER
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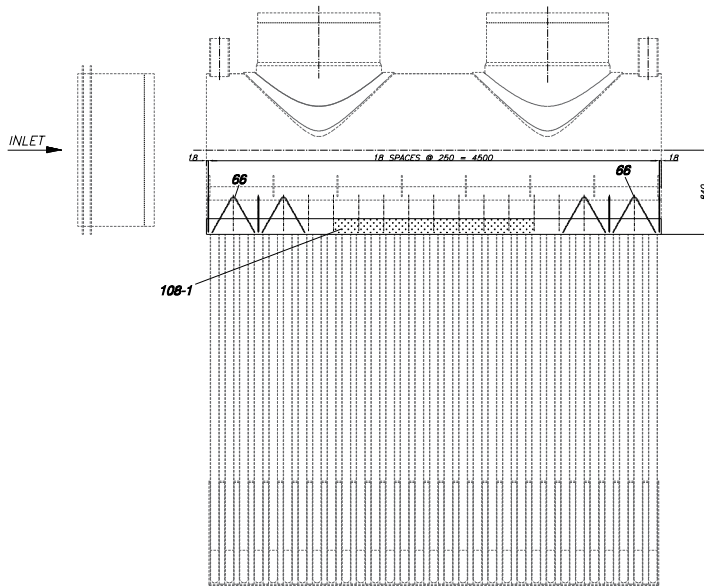
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|-------------|-------------|-------------------------|--------------|-------------|-------------|
| A5 | 1401.08.10 | ISSUED FOR APPROVAL | S.A. | A.R. | M.R. |
| A4 | 1401.07.12 | ISSUED FOR APPROVAL | S.A. | A.R. | M.R. |
| A3 | 1401.05.01 | ISSUED FOR APPROVAL | S.A. | A.R. | M.R. |
| A2 | 1401.02.31 | ISSUED FOR APPROVAL | S.A. | A.R. | M.R. |
| A1 | 1401.01.20 | ISSUED FOR APPROVAL | S.A. | A.R. | M.R. |
| Rev. | DATE | REVISION DETAILS | DRAWN | CHK. | APP. |

Hot Air Bundle-Support

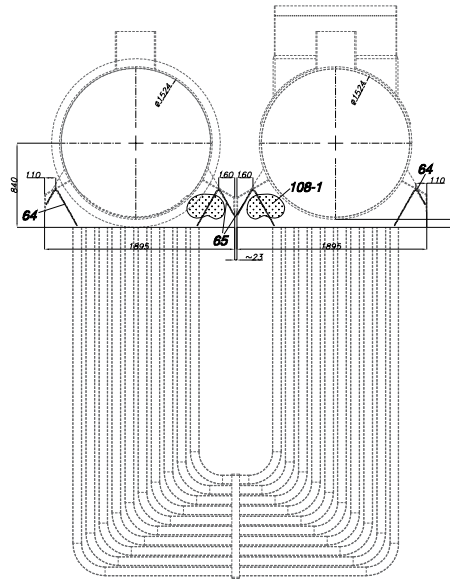
WEB SITE :		DWG No. : GSD-LMPS-HAB-01-01					E-mail:		Sheet:	
DWG No. :		S/N	Project		Dsp.	Serial	Size	Rev.	3 OF 4	
GSD-LMPS-HAB-01-01								A 5	Scale: AS SHOWN	

UNLESS OTHERWISE SPECIFIED

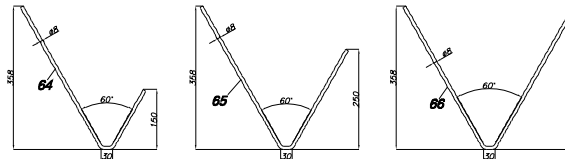
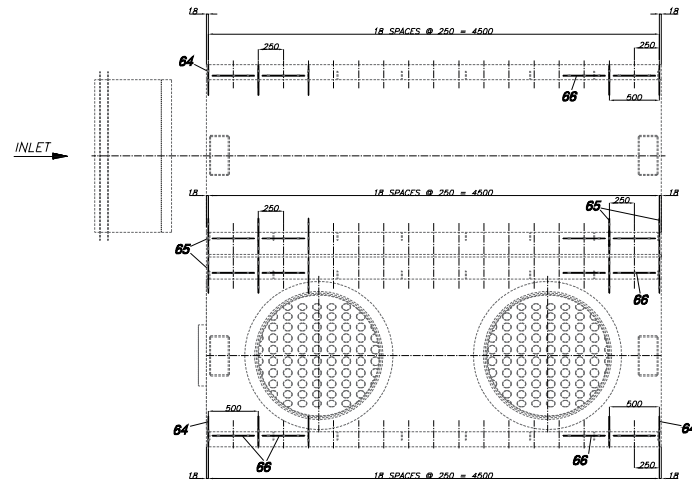
 SURFACE FINISH DIN 3141 RANGE 2	3RD ANGLE PROJECTION 
TOLERANCES & FITS: MACHINED SURFACES DIN 7168"MED" WELDED CONSTRUCTION ACC. TO "AWS"	BREAK ALL MACHINED SHARP EDGES BY 1x45° ALL DIM IN MILLIMETER



HOT AIR BUNDLE



LIGHT WEIGHT INSULATING CASTABLE (LOW IRON)



ANCHOR DETAILS
SCALE 1:4

- 1 . ALL DIMENSIONS ARE IN MILLIMETER.
2 . FOR MANUFACTURING USE DRAWING OF SHEET 1, 2 AND 4 ALL TOGETHER.

A5	1401.08.10	ISSUED FOR APPROVAL	S.A.	A.R.	M.R.
A4	1401.07.12	ISSUED FOR APPROVAL	S.A.	A.R.	M.R.
A3	1401.06.01	ISSUED FOR APPROVAL	S.A.	A.R.	M.R.
A2	1401.02.31	ISSUED FOR APPROVAL	S.A.	A.R.	M.R.
A1	1401.01.20	ISSUED FOR APPROVAL	S.A.	A.R.	M.R.
Rev.	DATE	REVISION DETAILS	DRAWN	CHK.	APP.

VENDOR:

-

CLIENT:

Golgohar Iron & Steel
Development Company



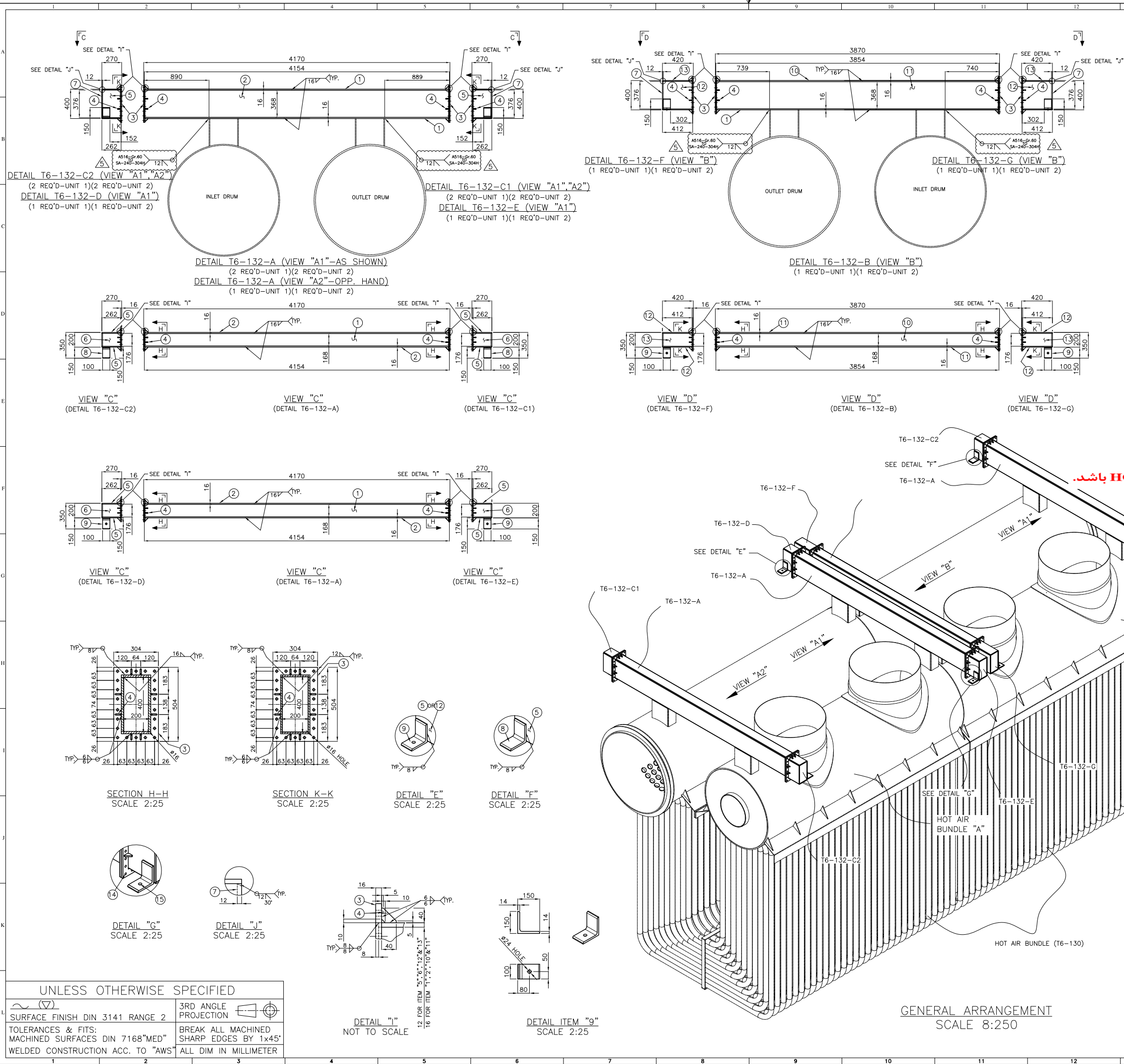
DRAWING TITLE:

Hot Air Bundle

WEB SITE :	DWG No. : CHD-14MP6-HAB-01-01	E-mail:	Sheet:
DWG No. :	S/N	Project	Dsp.
CHD-14MP6-HAB-01-01			
	Serial	Size	Rev.
			A 5
			Scale:
			AS SHOWN

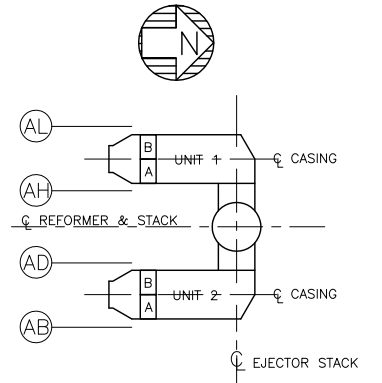
UNLESS OTHERWISE SPECIFIED

	3RD ANGLE PROJECTION
SURFACE FINISH DIN 3141 RANGE 2	
TOLERANCES & FITS: MACHINED SURFACES DIN 7168"MED" WELDED CONSTRUCTION ACC. TO "AWS"	BREAK ALL MACHINED SHARP EDGES BY 1x45" ALL DIM IN MILLIMETER



BILL OF MATERIAL					
FOR: HEAT RECOVERY SYSTEM-HOT AIR BUNDLE SUPPORT					
DWG: GGMMMH48-T6-132					
ITEM	QTY	DESCRIPTION	WEIGHT (kg)	MATERIAL	REMARKS
			EA. PRICE	TOTAL 2 MODULES	
T6-132-A (3 REQ'D.-UNIT1 & 3 REQ'D.-UNIT2)					WT. EA. 578 kg
1	12	PL 16 x 168 x 4154	88	1056	A516-Gr.60
2	12	PL 16 x 368 x 4154	192	2304	A516-Gr.60
3	12	PL 16 x 304 x 504	9	108	A516-Gr.60
4	96	PL 10	0.1	9.6	A516-Gr.60
T6-132-B (1 REQ'D.-UNIT1 & 1 REQ'D.-UNIT2)					WT. EA. 538 kg
3	4	PL 16 x 304 x 504	9	36	A516-Gr.60
4	32	PL 10	0.1	3.2	A516-Gr.60
10	4	PL 12 x 168 x 3854	81	324	A516-Gr.60
11	4	PL 12 x 368 x 3854	178	712	A516-Gr.60
T6-132-C1 (2 REQ'D.-UNIT1 & 2 REQ'D.-UNIT2)					WT. EA. 46 kg
T6-132-C2 (2 REQ'D.-UNIT1 & 2 REQ'D.-UNIT2)					WT. EA. 46 kg
3	8	PL 16 x 304 x 504	9	72	A516-Gr.60
4	64	PL 10	0.1	6.4	A516-Gr.60
5	16	PL 12 x 262 x 376	9	144	A516-Gr.60
6	16	PL 12 x 176 x 262	4	64	A516-Gr.60
7	8	PL 12 x 176 x 376	6	48	A516-Gr.60
8	8	L 150 x 14 x 100 LG.	3	24	A516-Gr.60
T6-132-D (1 REQ'D.-UNIT1 & 1 REQ'D.-UNIT2)					WT. EA. 46 kg
T6-132-E (1 REQ'D.-UNIT1 & 1 REQ'D.-UNIT2)					WT. EA. 46 kg
3	4	PL 16 x 304 x 504	9	36	A516-Gr.60
4	32	PL 10	0.1	3.2	A516-Gr.60
5	8	PL 12 x 262 x 376	9	72	A516-Gr.60
6	8	PL 12 x 176 x 262	4	32	A516-Gr.60
7	4	PL 12 x 176 x 376	6	24	A516-Gr.60
9	4	L 150 x 14 x 100 LG.	3	12	A516-Gr.60
12	8	PL 12 x 376 x 412	15	120	A516-Gr.60
13	8	PL 12 x 176 x 412	7	56	A516-Gr.60
T6-132-F (1 REQ'D.-UNIT1 & 1 REQ'D.-UNIT2)					WT. EA. 63 kg
T6-132-G (1 REQ'D.-UNIT1 & 1 REQ'D.-UNIT2)					WT. EA. 63 kg
3	4	PL 16 x 304 x 504	9	36	A516-Gr.60
4	32	PL 10	0.1	3.2	A516-Gr.60
7	4	PL 12 x 176 x 376	6	24	A516-Gr.60
9	4	L 150 x 14 x 100 LG.	3	12	A516-Gr.60
12	8	PL 12 x 376 x 412	15	120	A516-Gr.60
13	8	PL 12 x 176 x 412	7	56	A516-Gr.60
BOLTS, NUTS & WASHER (FOR TWO UNITS)					
14	352	M12 x 65 GLVD. BOLTS, NUT & WASHER	-	-	10.9 DIN 933,934,125
15	8	M22 x 95 GLVD. BOLTS, NUT & WASHER	-	-	10.9 DIN 933,934,125

*** ساخت دستکها باید مطابق HOT AIR BUNDLE B باشد.



NOTES:
1. All dimensions given in millimeters.
2. This b.o.m. include all supports, bolts, nuts & washers for two units.
Some clearances between bundle supports and structure were too small that would not allow enough expansion for bundles. So, L parts specified must be omitted.

REFERENCE DRAWINGS:
T6-130 - Heat recovery system hot air bundle detail gen. arrgt.

REV.	DATE	DESCRIPTION	PURPOSE OF ISSUE	PREPARE	CHECK	APPROVE
5	18 Feb. 14	T.Q 049	AS BUILT	AFRAH	FAHREHMAND	ASHARI
4	18 Jul. 13	-	ISSUED FOR CONSTRUCTION	AFRAH	FAHREHMAND	SHAMI
3	14 Nov. 12	-	ISSUED FOR CONSTRUCTION	AFRAH	FAHREHMAND	SHAMI
2	27 Oct. 12	-	ISSUED FOR APPROVAL	AFRAH	FAHREHMAND	SHAMI
1	2 Oct. 12	-	ISSUED FOR APPROVAL	AFRAH	FAHREHMAND	SHAMI
REV.	DATE	DESCRIPTION	PURPOSE OF ISSUE	PREPARE	CHECK	APPROVE
Project: GOL-E-GOHAR MEGA MODULE PROJECT						
Client: Contractor: شرکت توسعه انرژی و فولاد گیلان G.I.S.D.Co						
Client's Project: Project Code: Main Contractor: Area Code: Plant Group: Equipment Code: Document Type: Eng. Discipline: Serial No.						
GISD 7-1 119 1005 7 RU 04 M 132						
SIGNATURE DATE designation: HEAT RECOVERY SYSTEM HOT AIR BUNDLE SUPPORTS DETAILS						
DESIGNED: MTE Oct. 12 drawing-No. GGMM MH 48 T6 132						
PREPARED: AFRAH Oct. 12 repl. for: repl. by:						
CHECKED: FAHREHMAND Oct. 12						
APPROVED: SHAMI Oct. 12						
SCALE: 1:25 REV: 5 SIZE: A1 SHEET: 1/1						
CONT. & PROJ. NO: 90/1942						