



PARTO FAM KIAN

E.P.C Contractor of Industrial Projects

Company Overview





COMPANY OVER VIEW

PARTO FAM KIAN (PFK) is a highly acclaimed E.P.C company with years of experience and a national reputation for excellence. They are experts in food processing and mechanical utility systems, with a particular focus on ultra heat treatment systems. Through their extensive expertise, PFK has become a leader in their field and is highly specialized in providing top-quality solutions to their clients. Their impressive track record of success and their commitment to delivering outstanding results has earned them a well-deserved reputation as one of the best in the business.

The main services we can provide are:

- ✓ **Engineering Design, Consultation & Supervision**
- ✓ **Procurement**
- ✓ **Installation & Commissioning**
- ✓ **Energy Saving & Audits for Plant Optimization**
- ✓ **Training**





RELEVANT INDUSTRIES

These are just some samples
of application and industries we are dealing with.

- ✓ Petrochemicals
- ✓ Refineries
- ✓ Power Plants
- ✓ Textiles & Natural Fibers
- ✓ Dairy
- ✓ Electronics
- ✓ Automotive
- ✓ Rubber & Tires
- ✓ Hospitals
- ✓ Pharmaceutical
- ✓ Sugar Refining
- ✓ Fine Chemicals
- ✓ Food & Beverage
- ✓ Heating, Venting & Air Conditioning (HVAC)
- ✓ Other Industries





Departments

ENGINEERING

PROCUREMENT

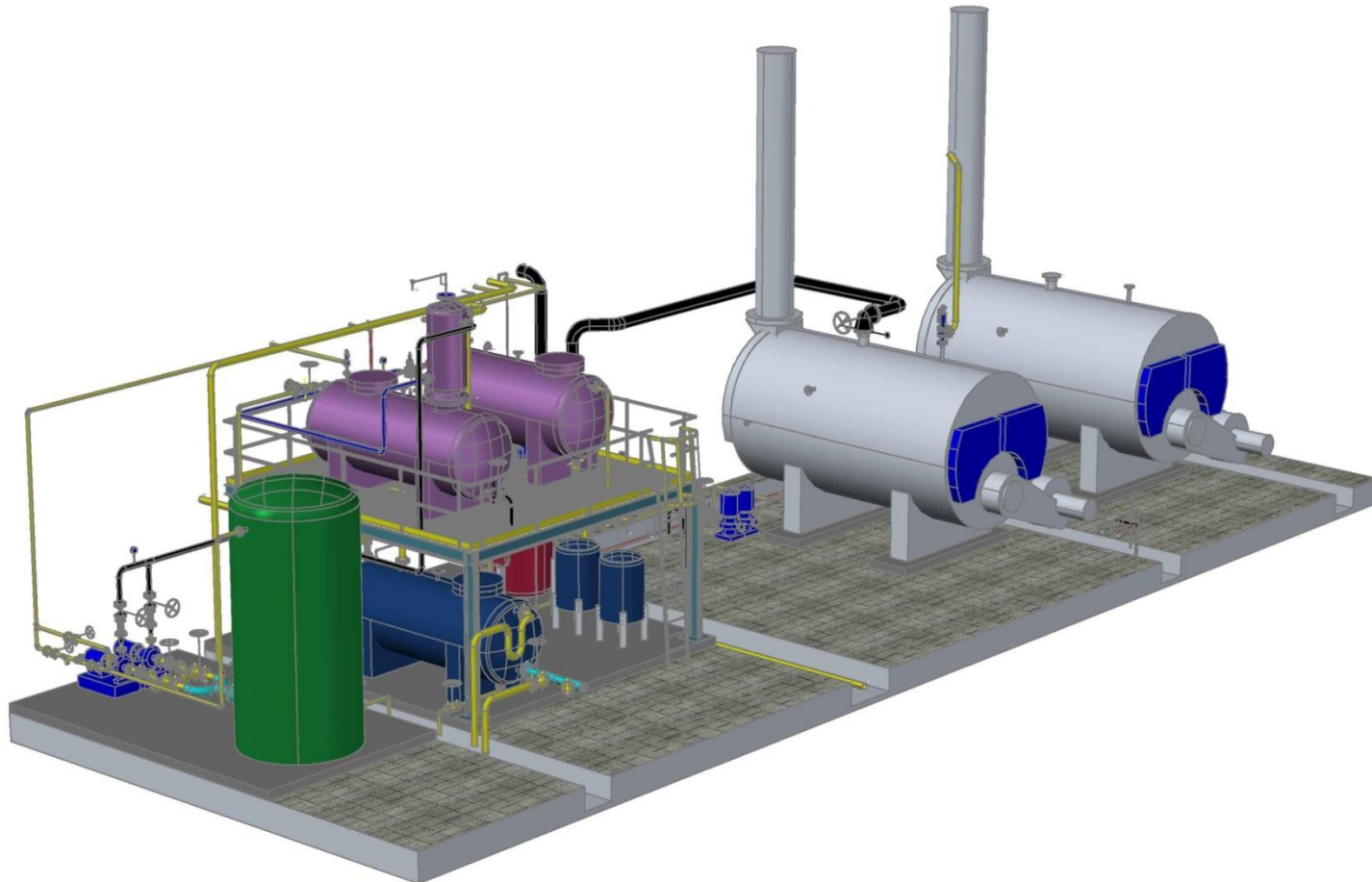
CONSTRUCT.

**AUDIT
&
ENERGY
SAVING**

TRAINING



ENGINEERING SERVICES





RICH SOFTWARE & RESOURCES

Spisax Sarcos Steam Trap Management System v2.0

File Edit Tools Help

Steam Trap

Current Trap Details

Company: EXAMPLE COMPANY

Site Name: EXAMPLE SITE

Trap Number: 0007

Location: REAR ROLLER SHUTTER DOOR

Detail: BESIDE CLOCK IN AREA

Height: ☐ Installed

Size: 20mm (3/4") ☐ Universal Trap

Model: VTS ☐ Open Ended Tr

Con Type: Screwed ☐ Strainer

Standard: BSP ☐ Ancillaries

Orientation: ☐ Isolation

WorkTable.xls

File

Transfer

Edit

View

Insert

Format

Tools

Data

Help

Comparing results

Comparison: Previous list: SURVEY

Comparison Added traps Deleted traps

Area	Trap No	Location	Name	Type	Mfr.	Press.(bar)	Size(mm)	Flange	Conn.	Set T.(°C)	Vibration	Cond.
A	4		S31N	Disc	MIYA	4	8				0	Good
A	4		S31N	Disc	MIYA	4	8					
A	5		S31N	Disc	MIYA	4	8				12	Leak
A	5		S31N	Disc	MIYA	4	8					
A	6		S31N	Disc	MIYA	4	8				11	Leak
A	6		S31N	Disc	MIYA	4	8					
A	7		S31N	Disc	MIYA	4	8				13	Leak
A	7		S31N	Disc	MIYA	4	8					
A	8		S31N	Disc	MIYA	4	8				15	Leak
A	8		S31N	Disc	MIYA	4	8					
A	9		S31N	Disc	MIYA	4	8				43	Leak
A	9		S31N	Disc	MIYA	4	8					

Number of traps:23

trap

PM150 ver.1.1

Options Survey Period

History DataPipe

Close



MIYAWAKI INC.

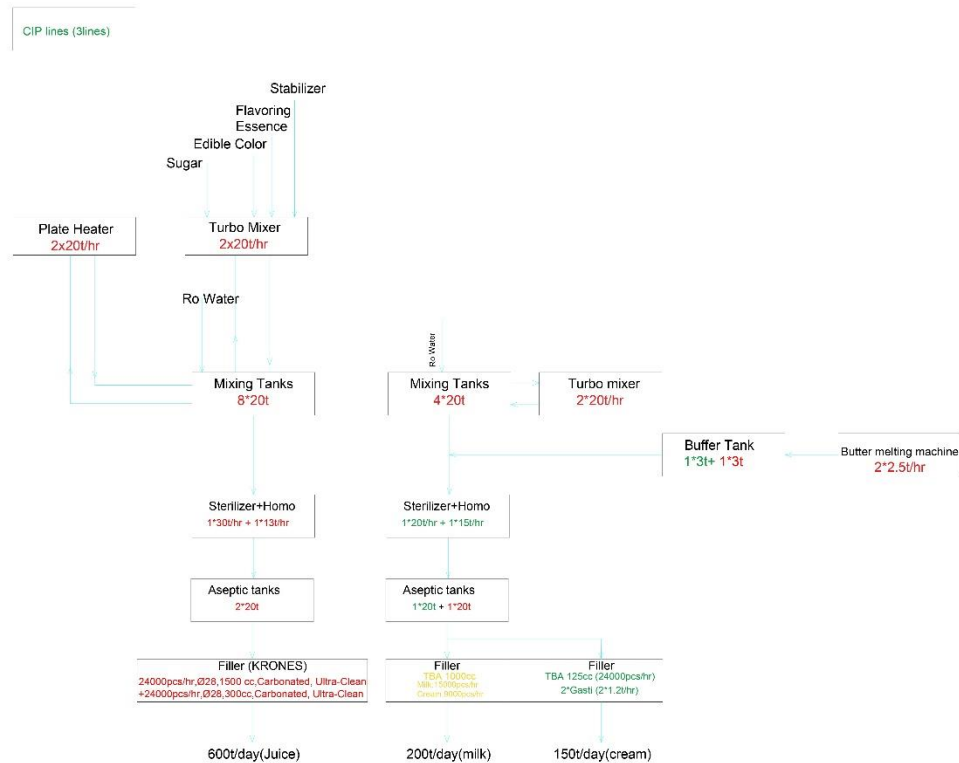




EQUIPMENT REQUIREMENT EVALUATION

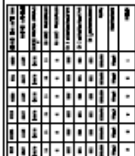
UHT & Juice Block Diagram

Milk: 600t/day
Cream: 150t/day





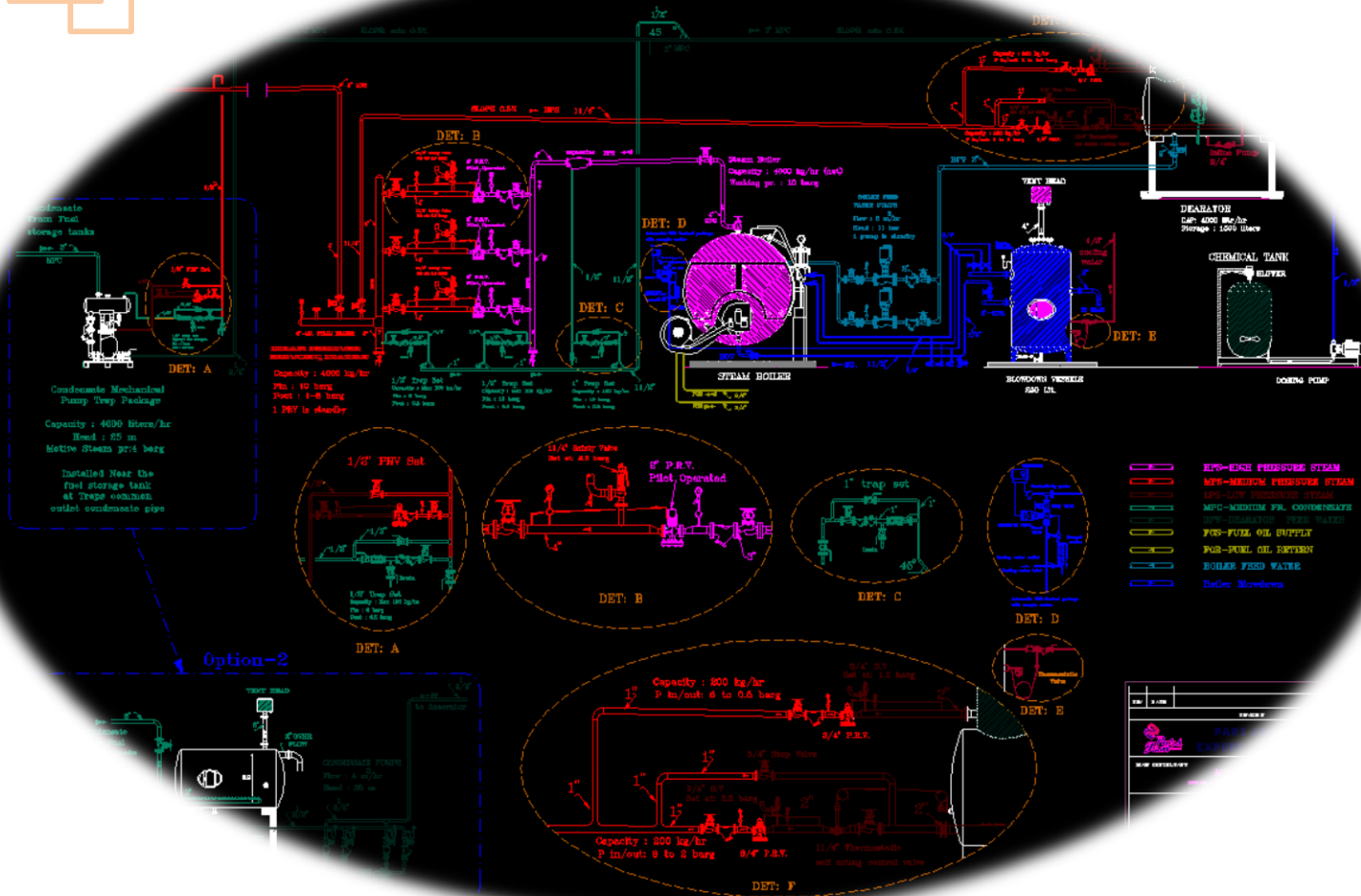
RYING FROM DIVERGENT TEND

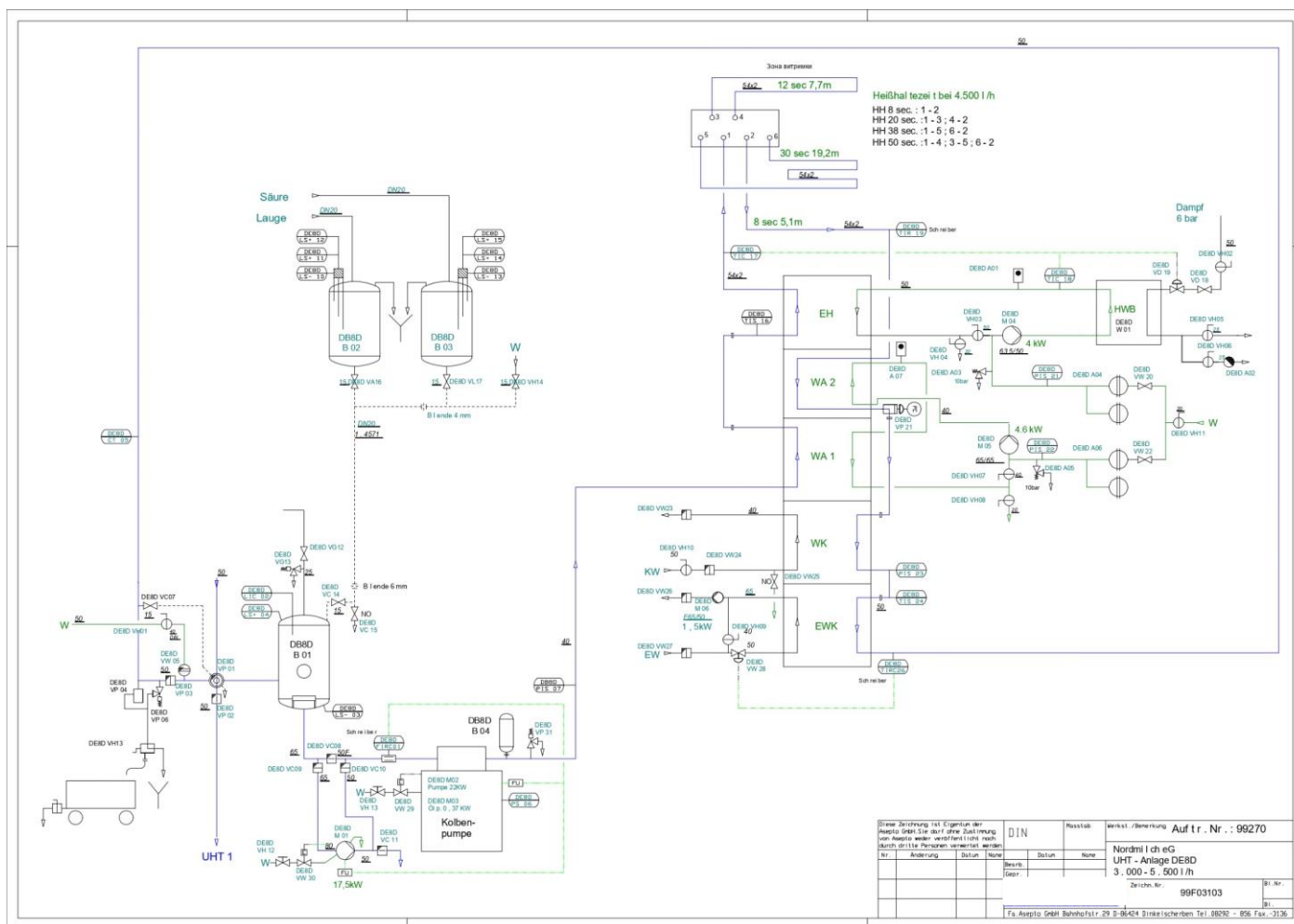




پترو فام گیان

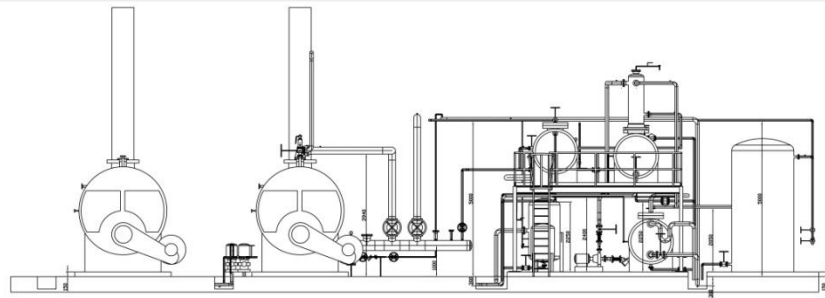
FLOW DIAGRAM



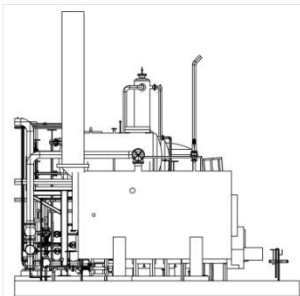




EQUIPMENT ARRANGMENT

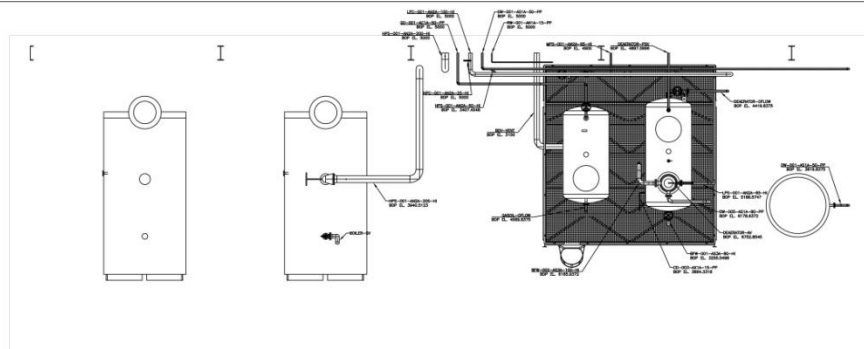


1 FRONT VIEW
Scale 1:10

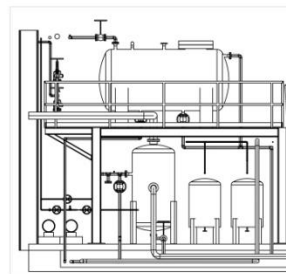


2 LEFT VIEW
Scale 1:10

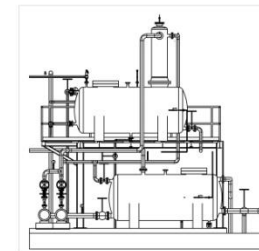
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AD	FOR REVIEW	18/04/13	I.R.	Z.K.	A.S.H.
REV.	DESCRIPTION	DATE	BY	CHKD	APPD
IRANIAN CATALYST DEVELOPMENT CO.					
PARS JAM CONTROL					
STEAM AHEAD TO BUILD TRUST!					
CENTRAL BOILER ROOM PIPING PLAN DRAWINGS					
DRAWING NUMBER: CD-PI-PLP-0015-01-AD					
JOB NUMBER: 1:40					
SHEET: 1 of 1					
REV: AD					



2 GENERAL VIEW, FROM EL. 2680 TO EL. 7000
Scale 1:1



E VIEW
Scale 1:1



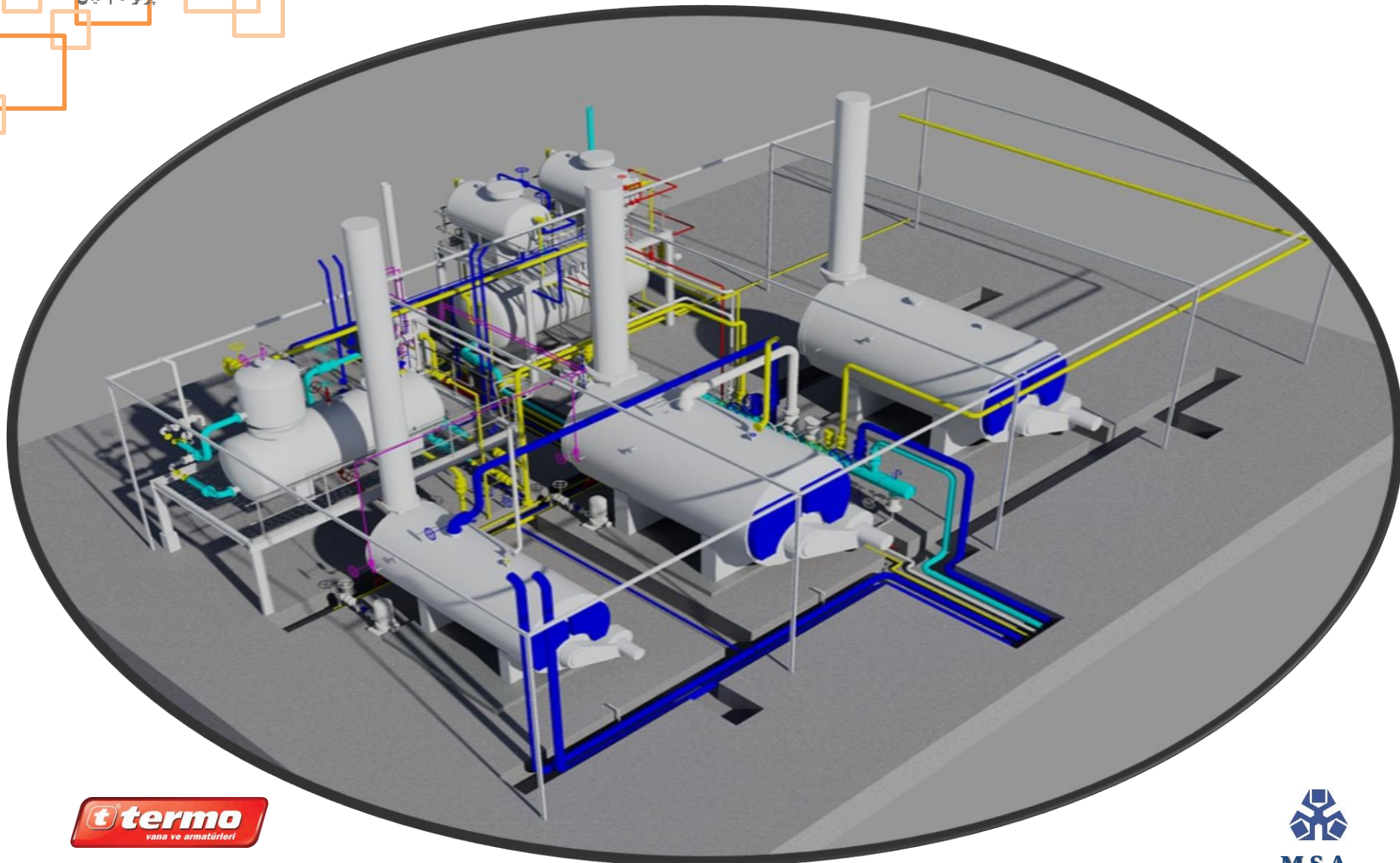
F VIEW
Scale 1:1

REV.	DESCRIPTION	DATE	BY	CHKD	APPD
AD	FOR REVIEW	26/04/13	I.R.	Z.K.	A.S.H.
REV.	DESCRIPTION	DATE	BY	CHKD	APPD
IRANIAN CATALYST DEVELOPMENT CO.					
PARS JAM CONTROL					
STEAM AHEAD TO BUILD TRUST!					
CENTRAL BOILER ROOM PIPING PLAN DRAWINGS					
DRAWING NUMBER: CD-PI-PLP-0016-02-AD					
JOB NUMBER: 1:1					
SHEET: 1 of 1					
REV: AD					



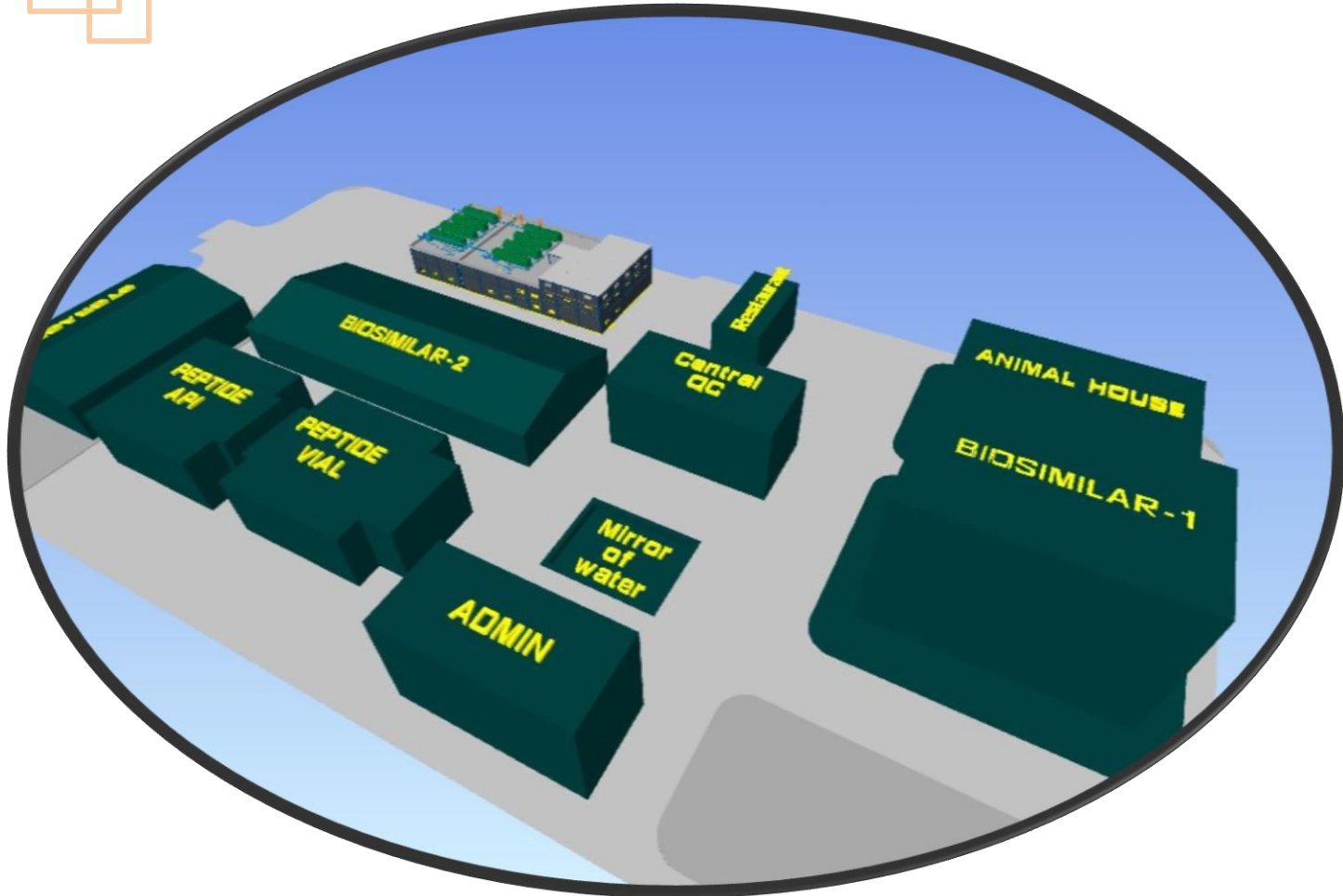


3D MODEL PREPARATION





BIOSUN PHARMED



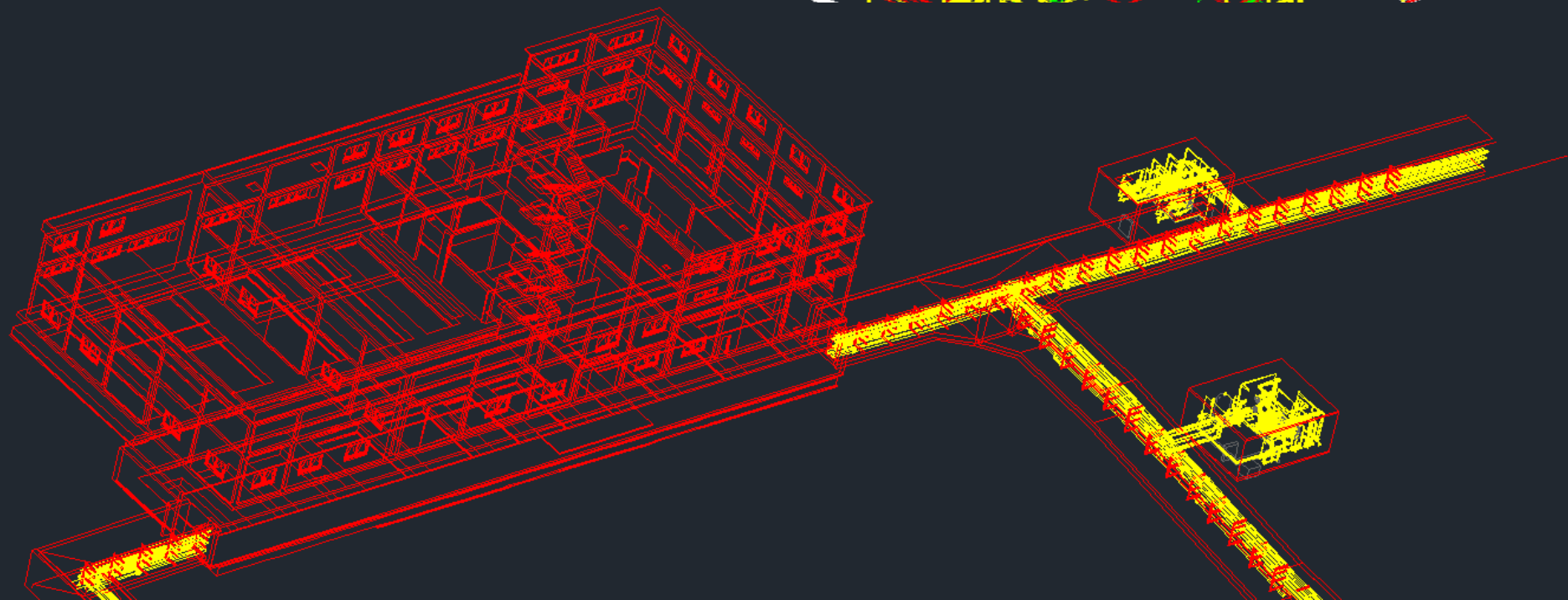
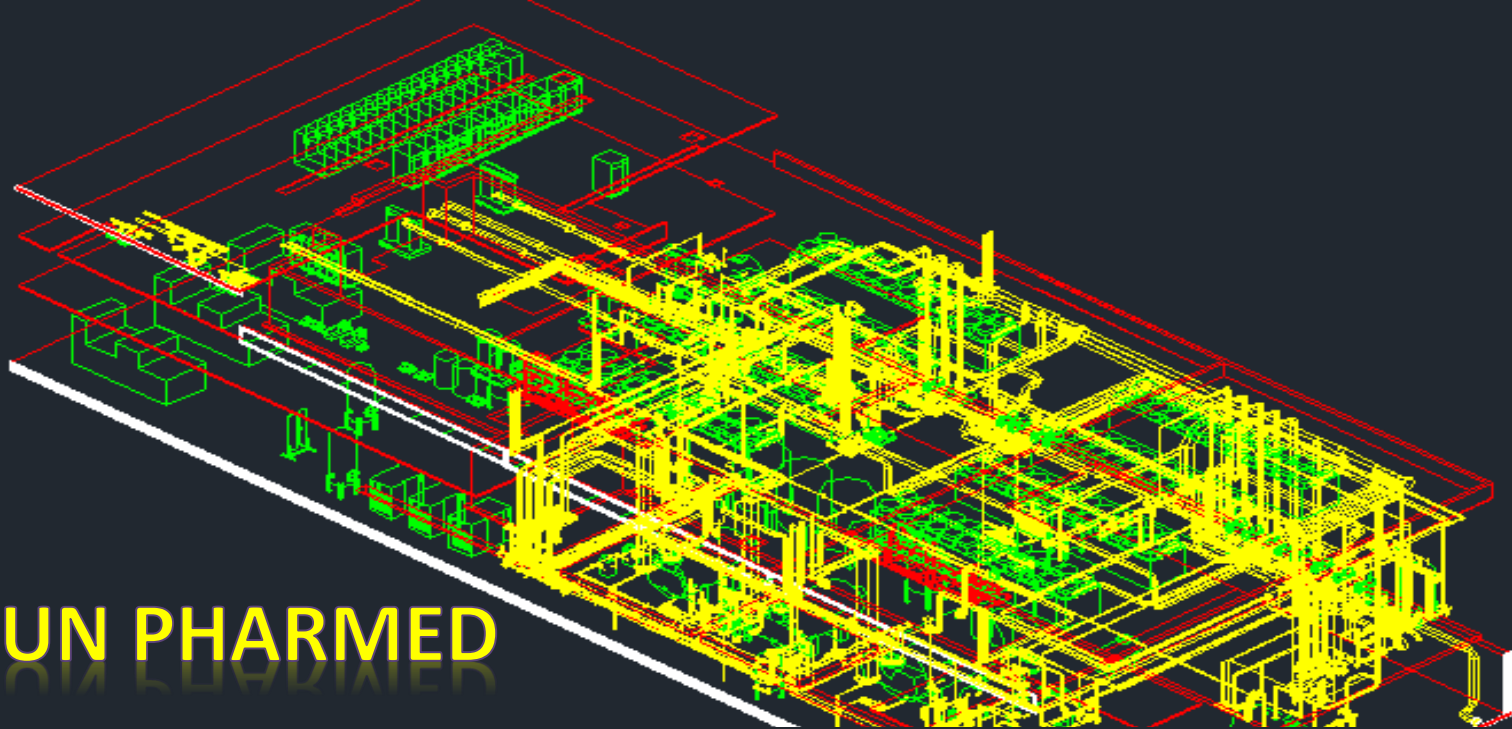


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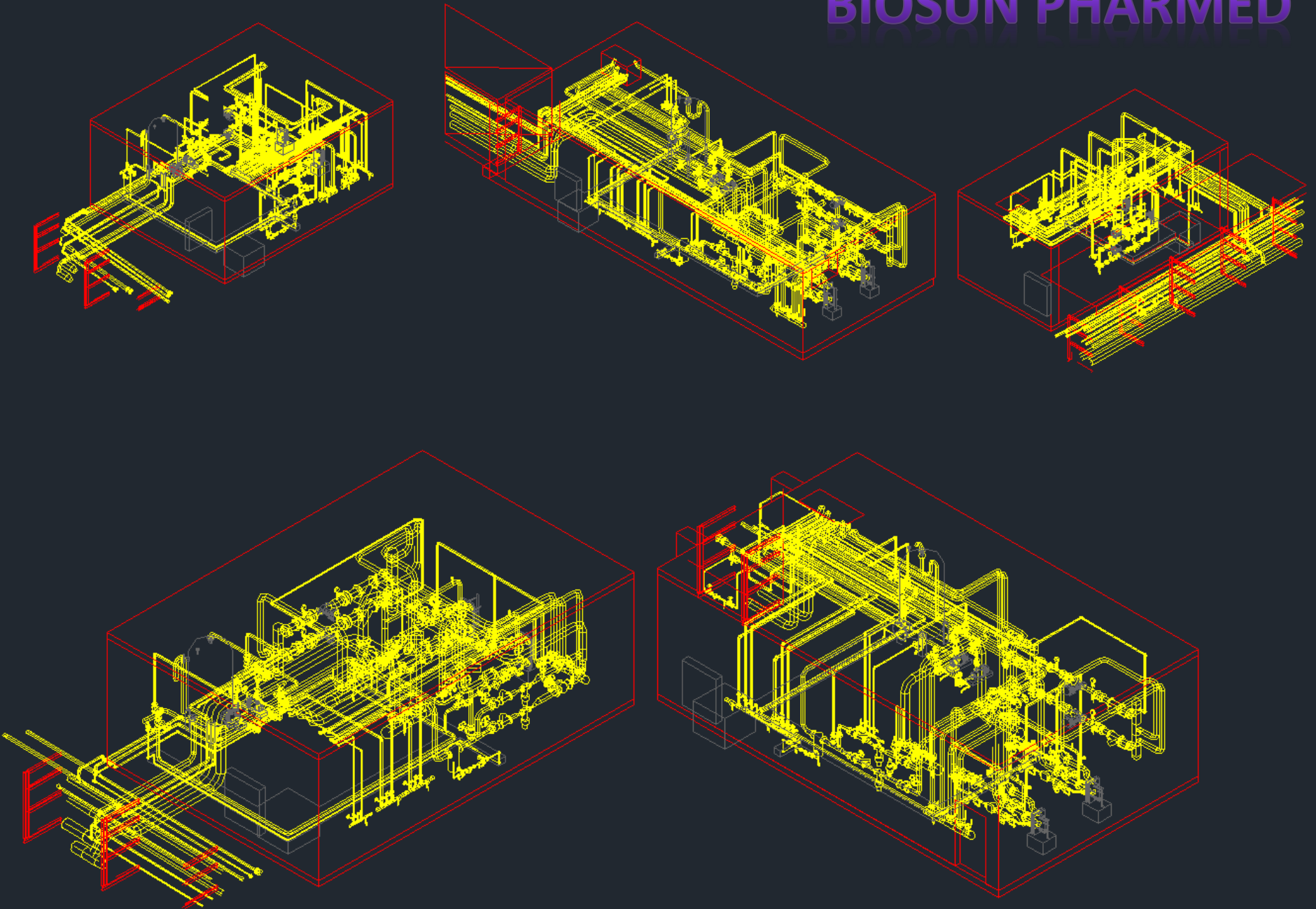
BIOSUN PHARMED



BIOSUN PHARMED

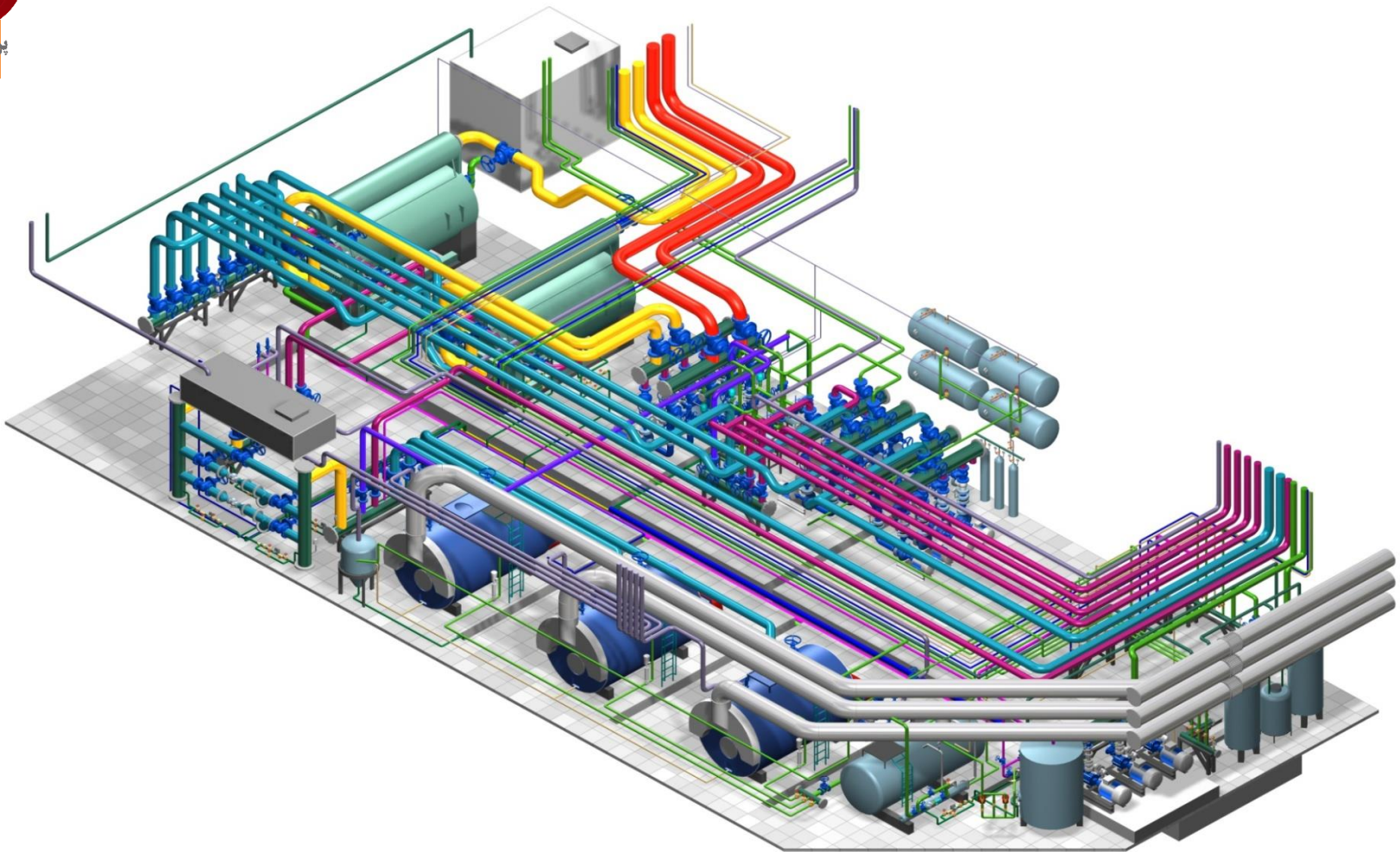


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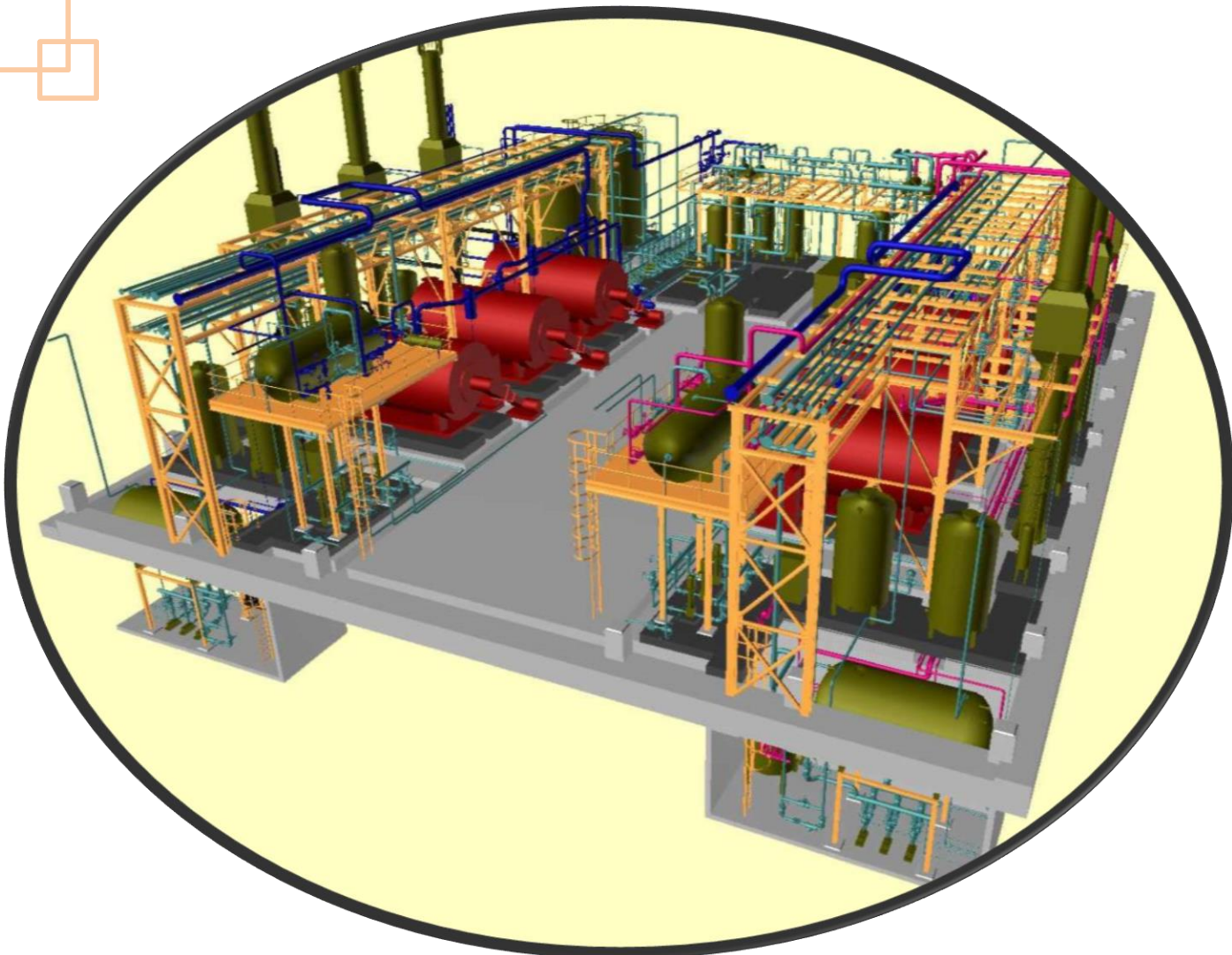


COMMERCIAL UTILITY



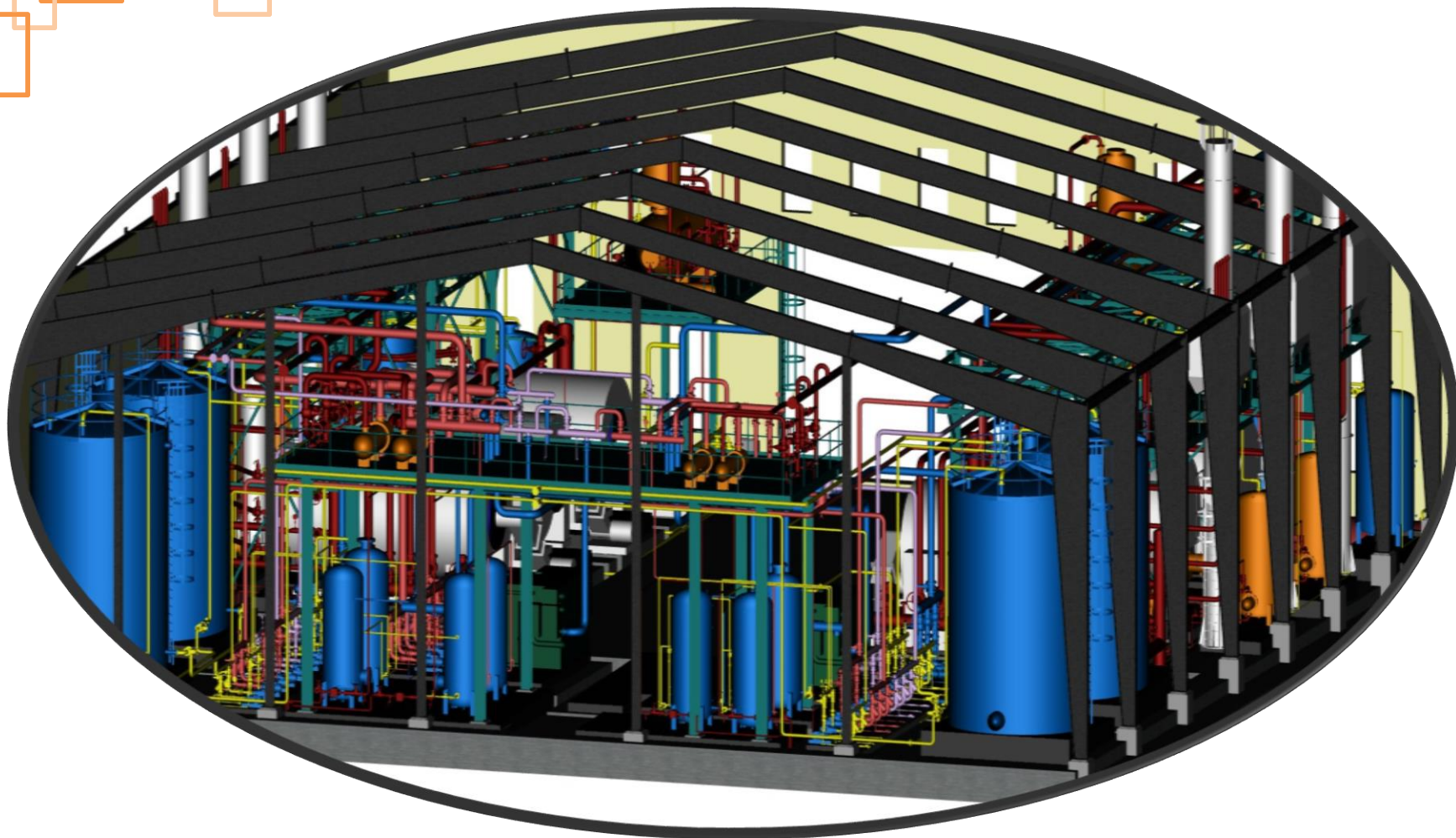


ZAR RESEARCH & INDUSTRIAL CO.



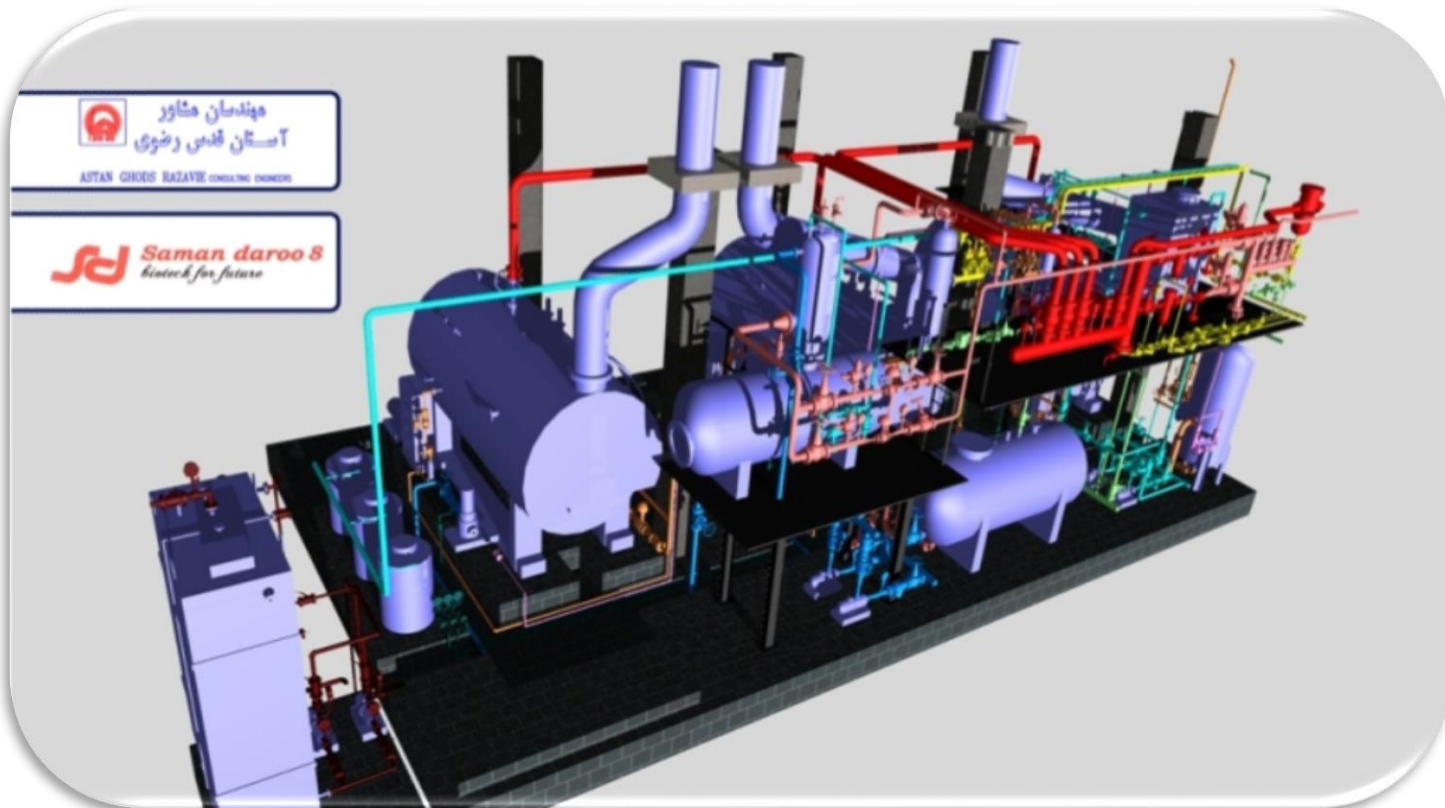


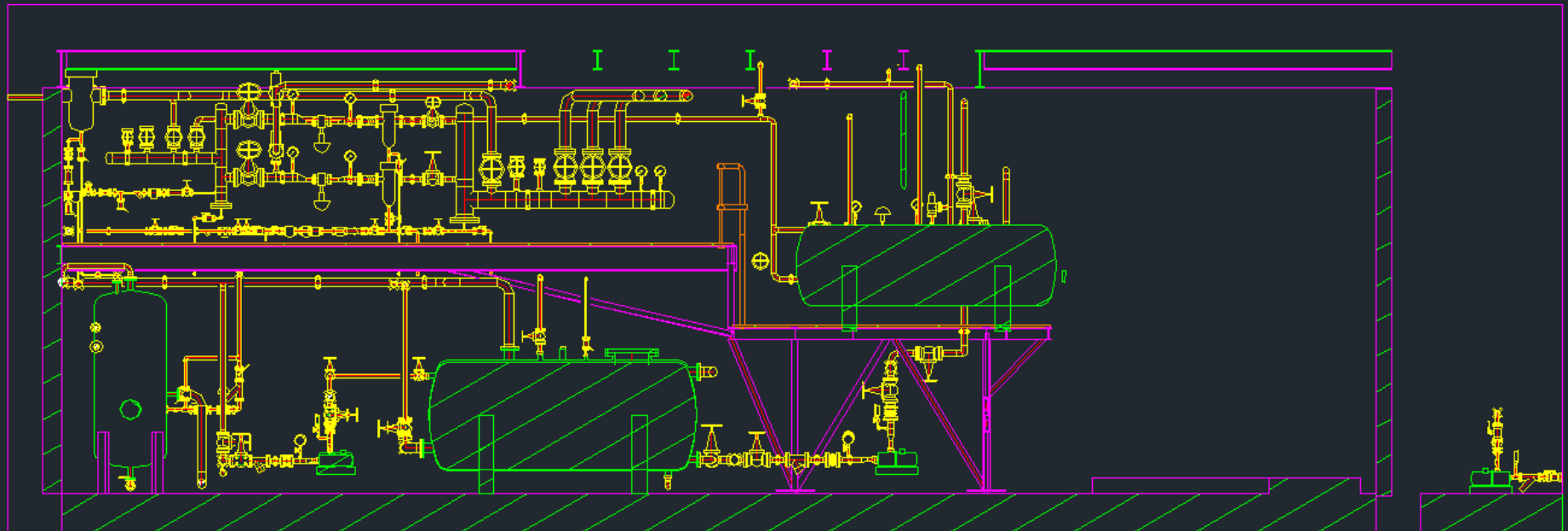
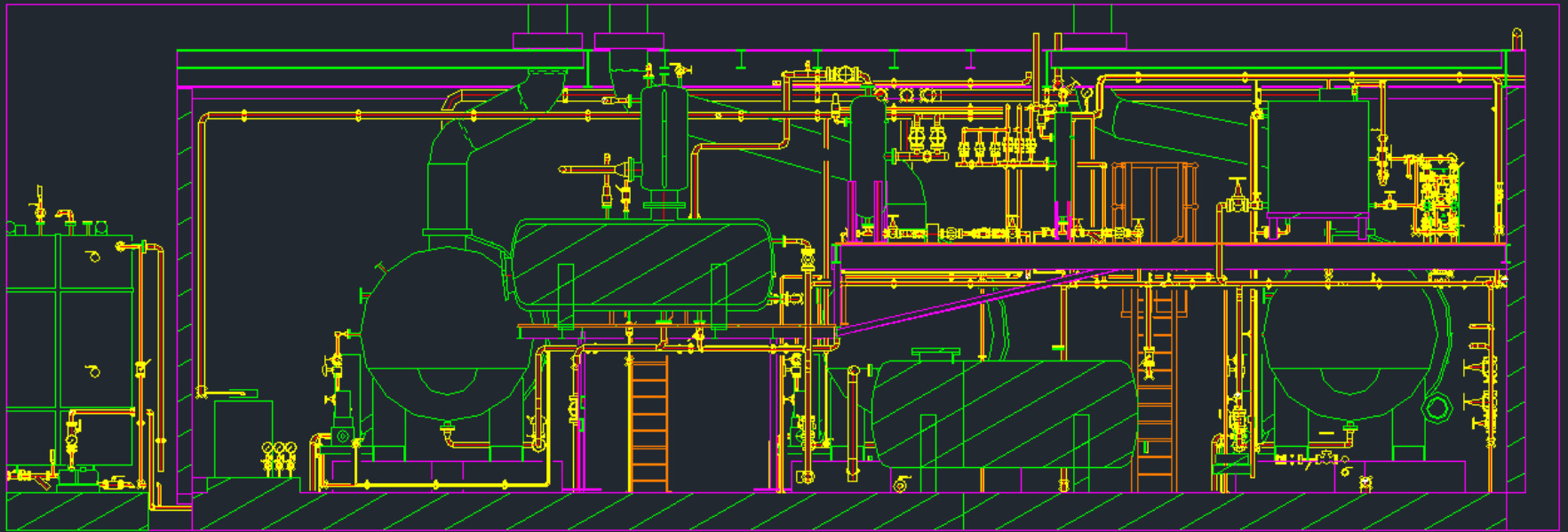
ZAR RESEARCH & INDUSTRIAL CO.

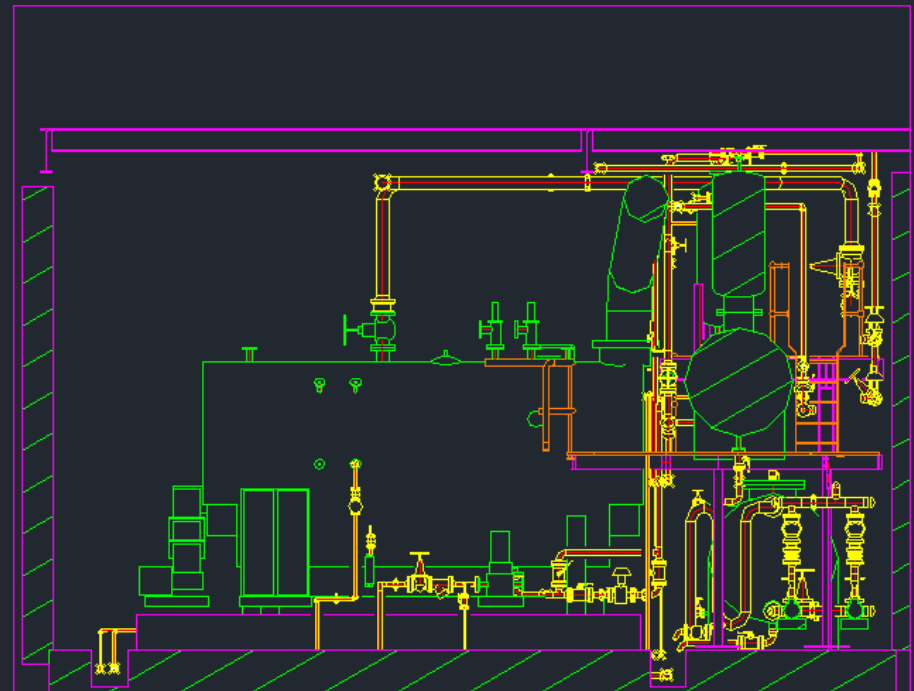
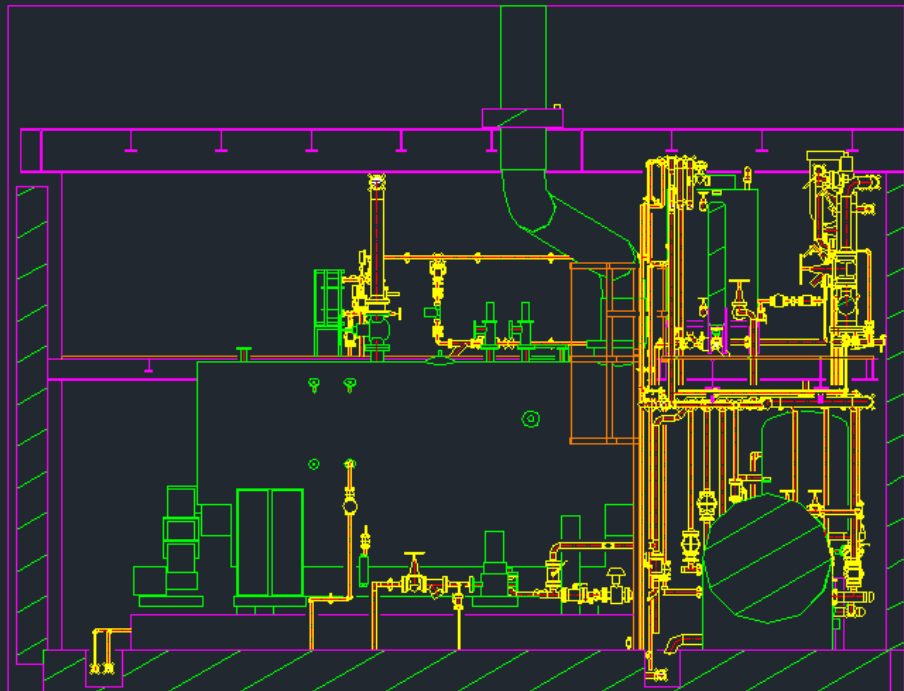
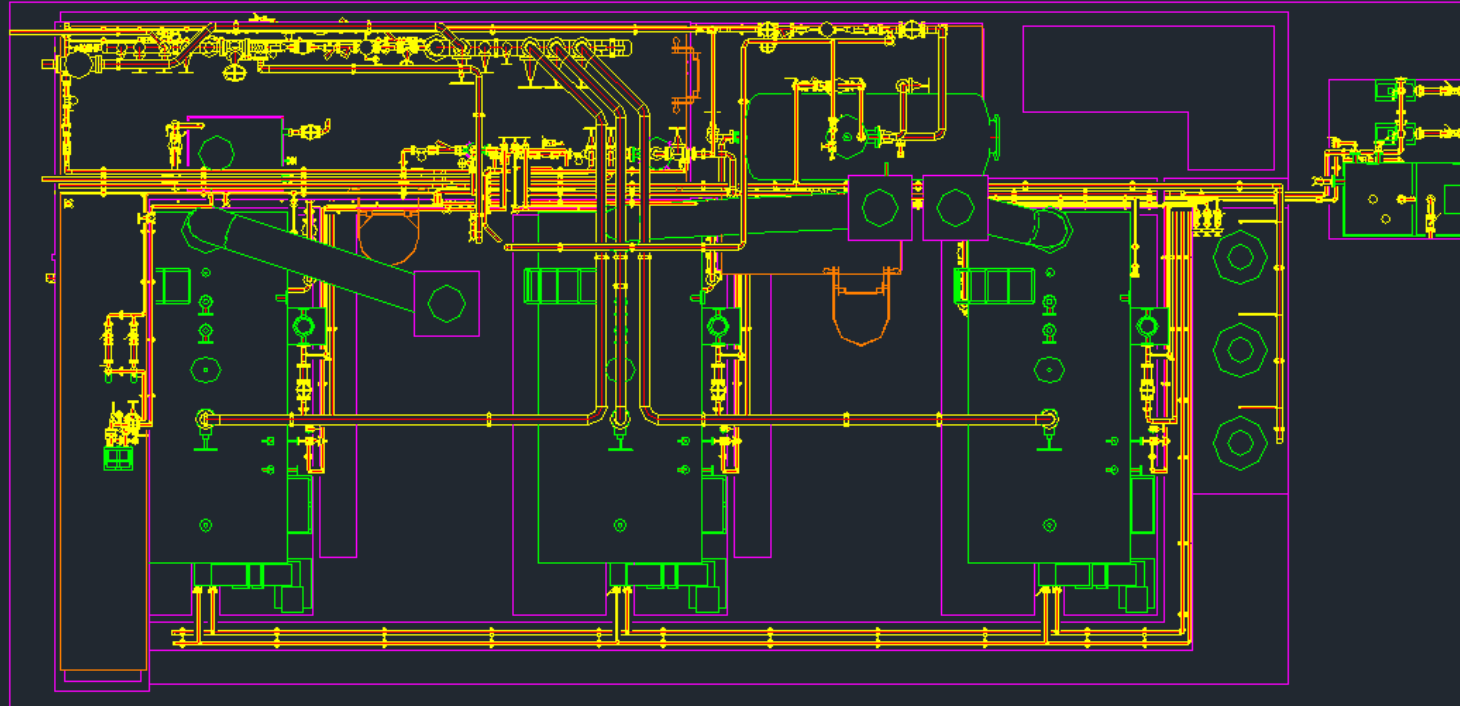




SAMAN DAROO (FACTOR-8)

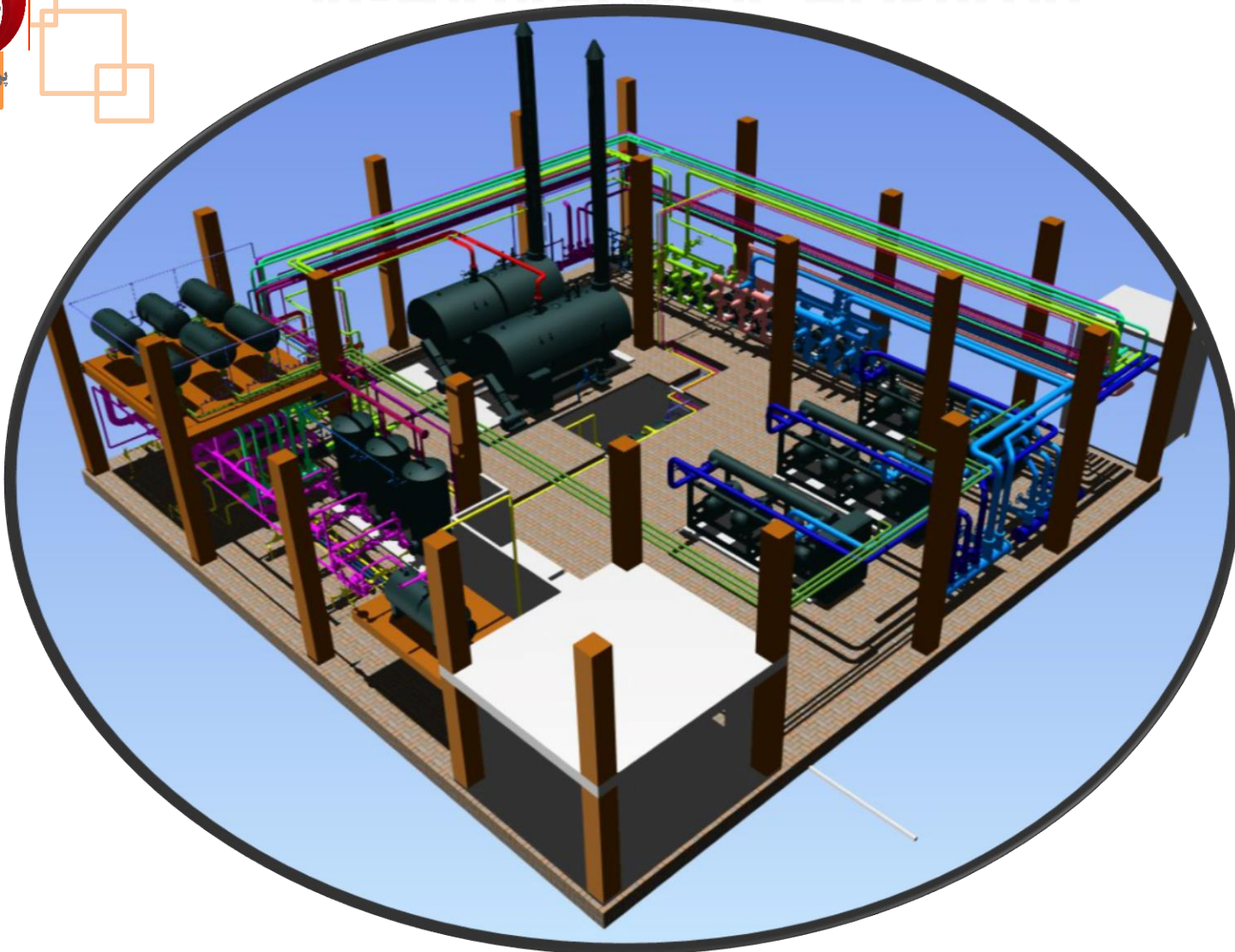






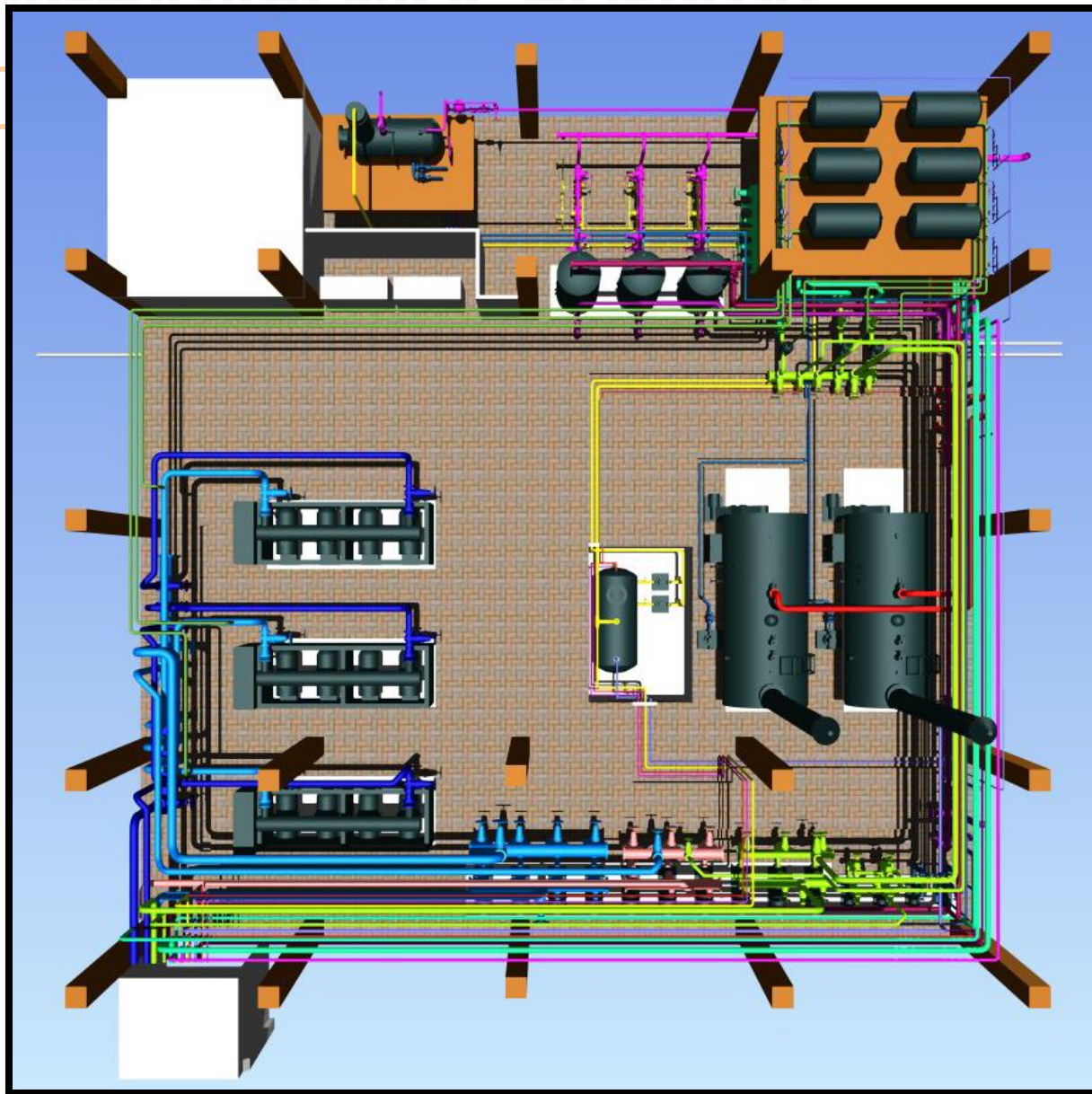


AGHAJARI NIOC HOSPITAL





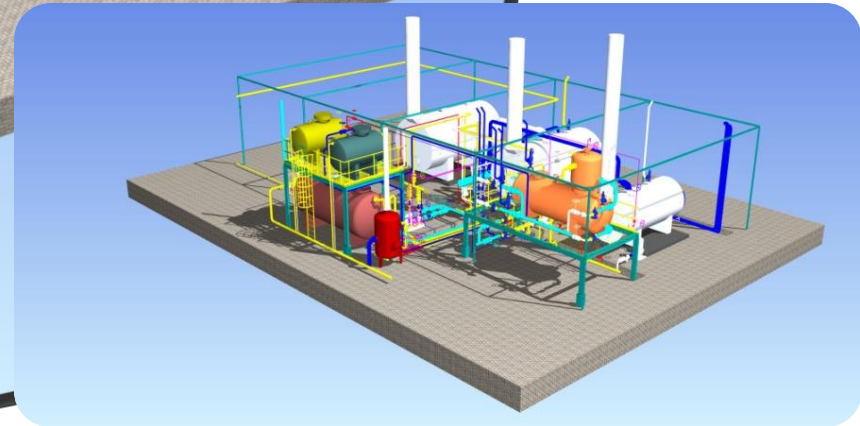
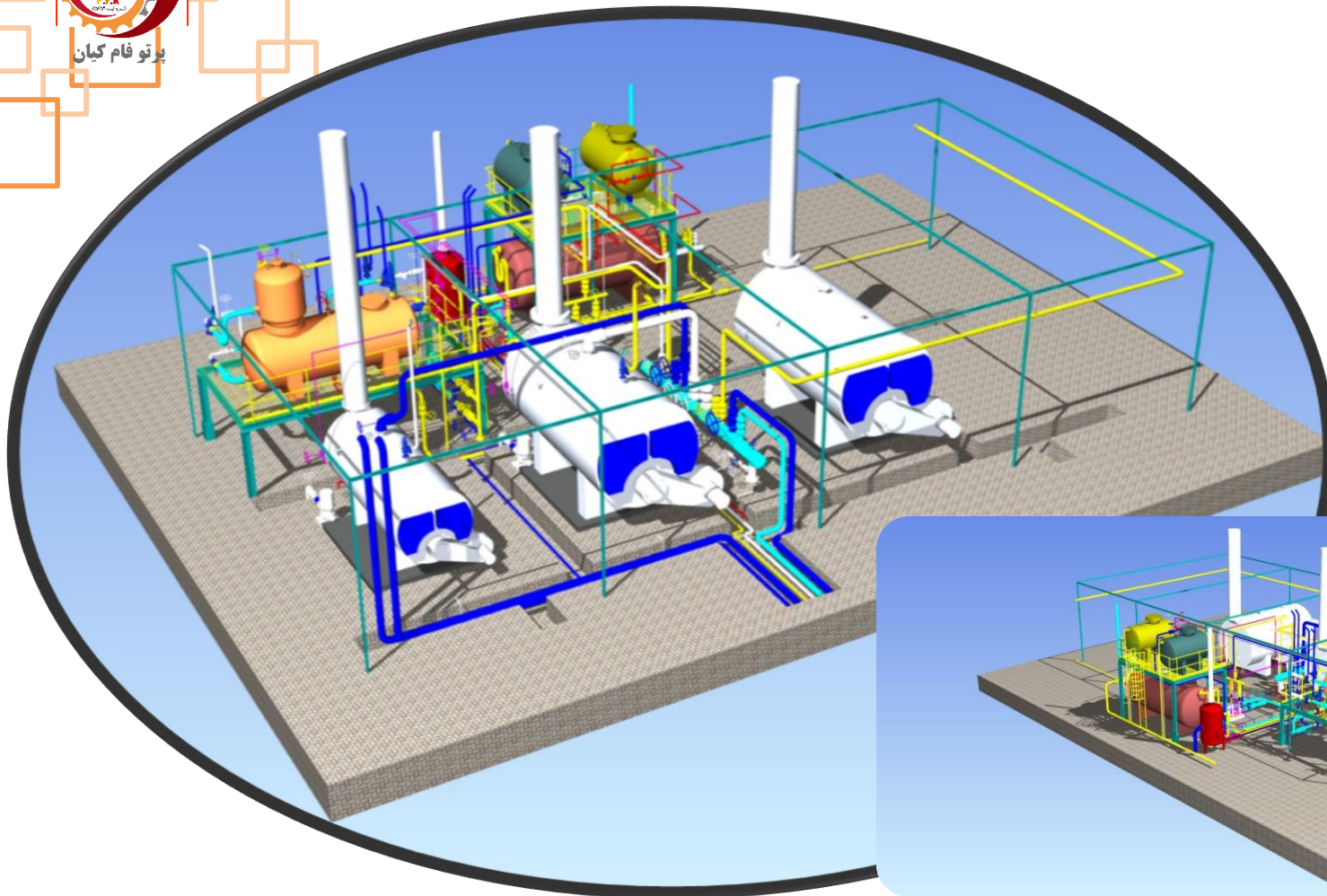
AGHAJARI NIOC HOSPITAL





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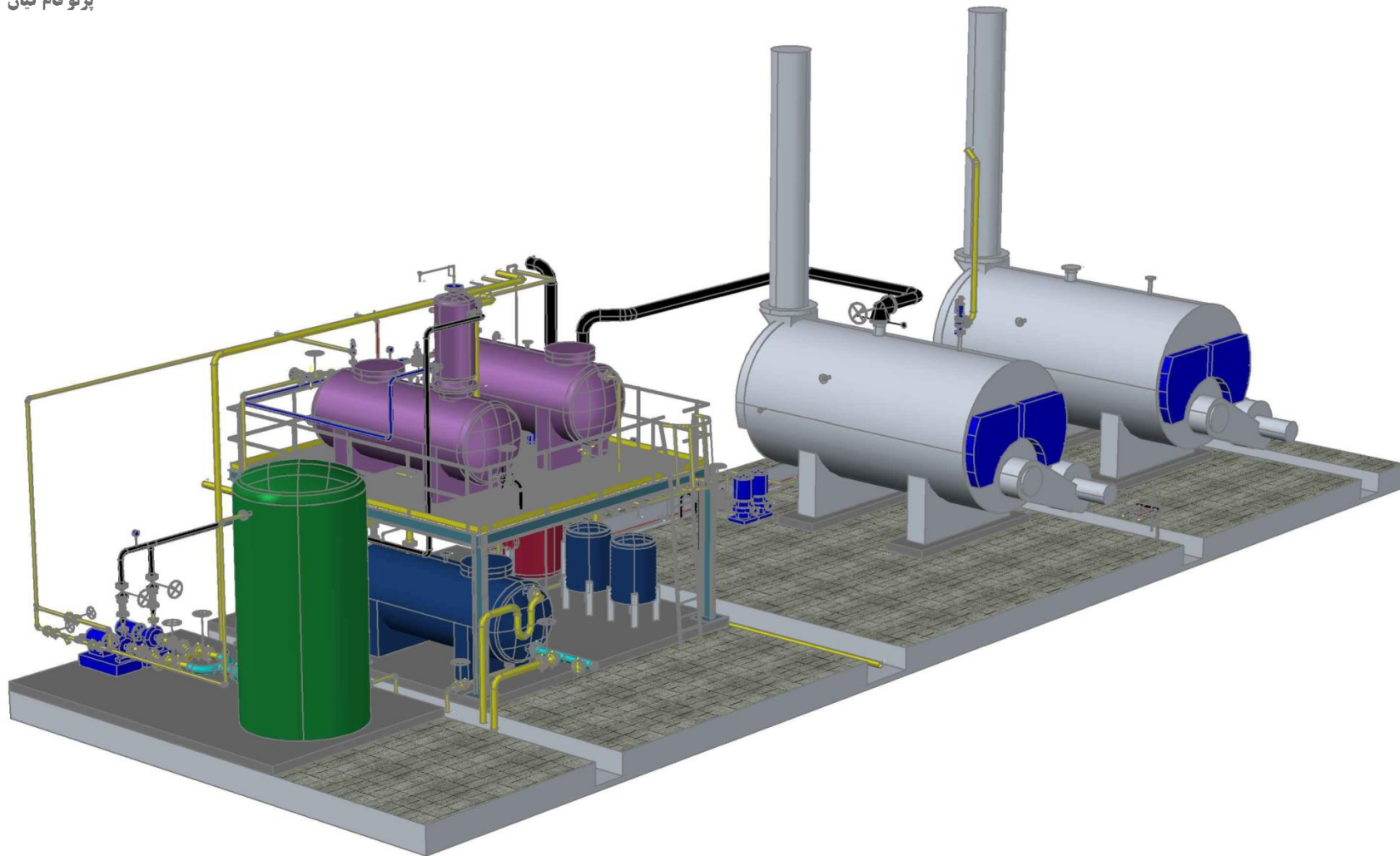
FARMAND CHOCOLATE CO.





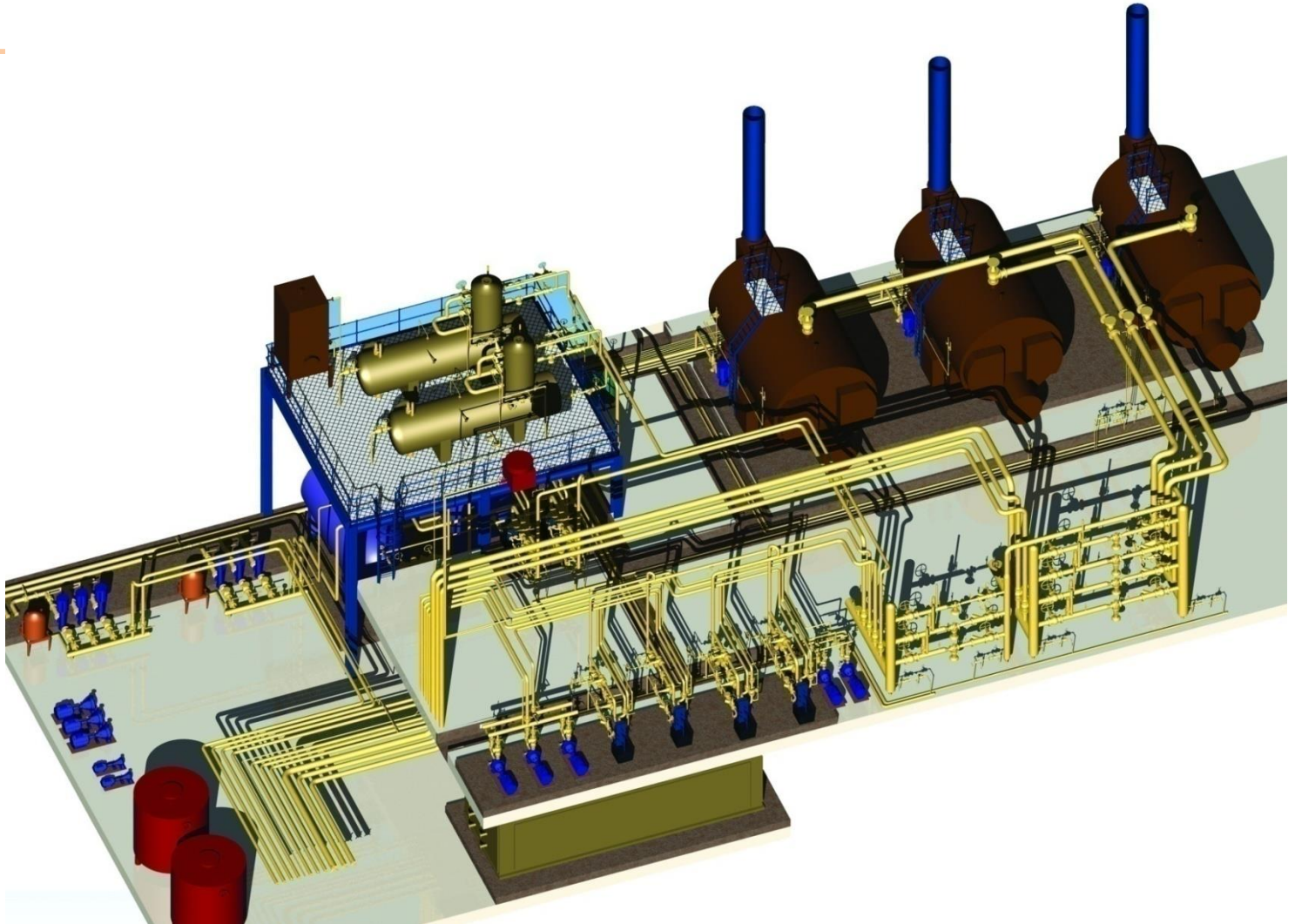
پرتو فام کیان

KATALIST IRAN



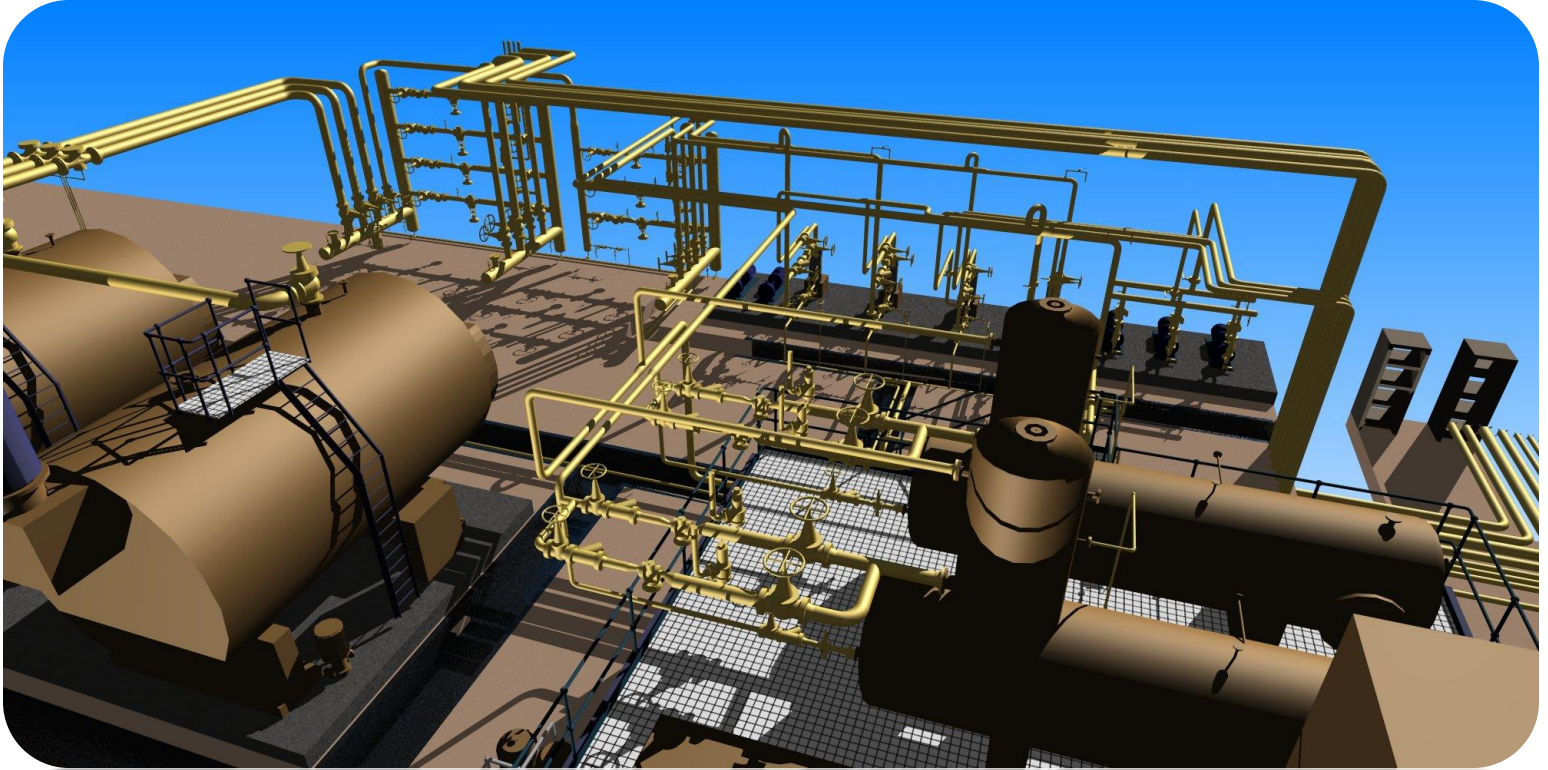


SADR CEMENT SEGMENT CO.



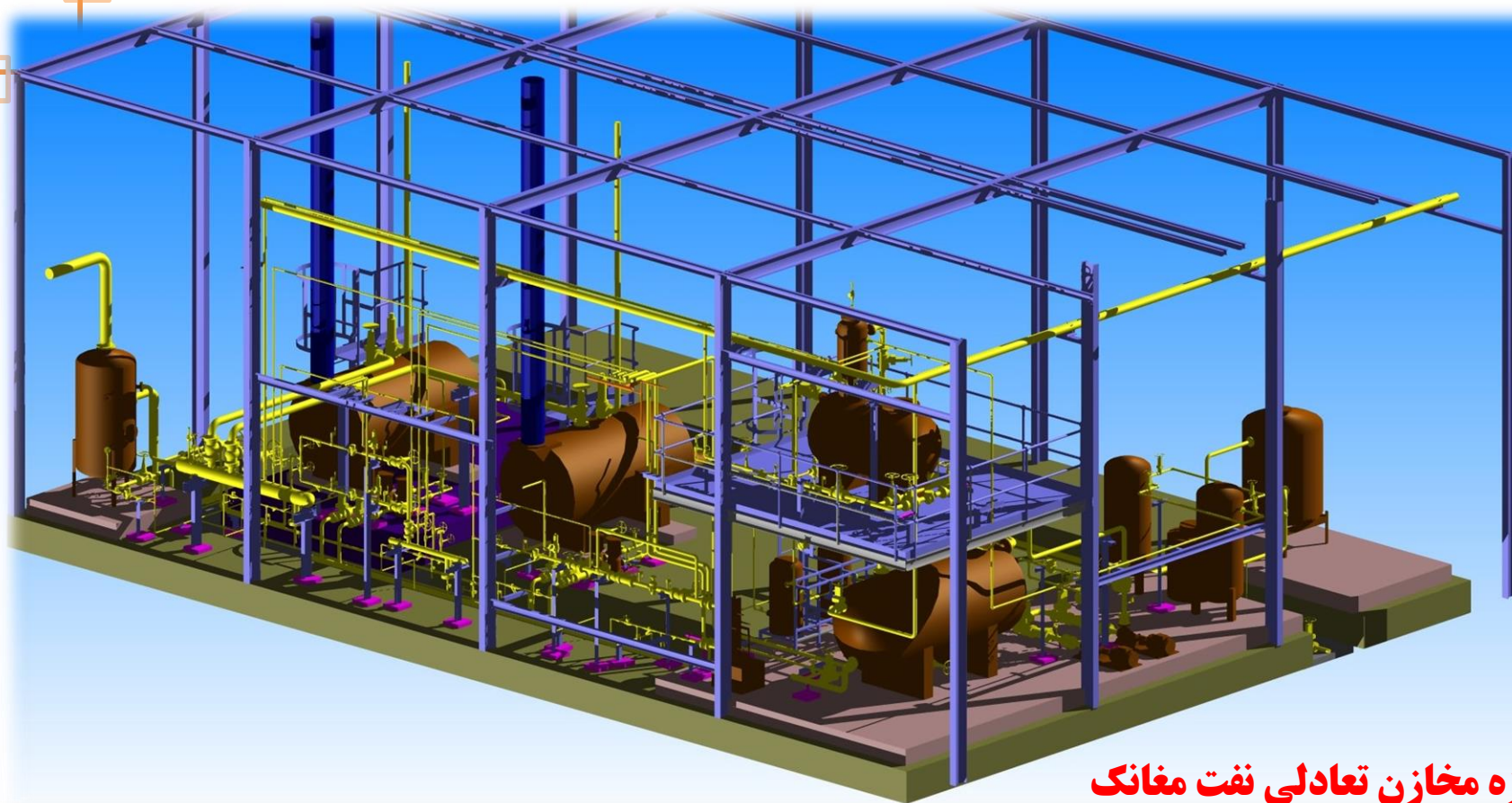


SADR CEMENT SEGMENT CO.





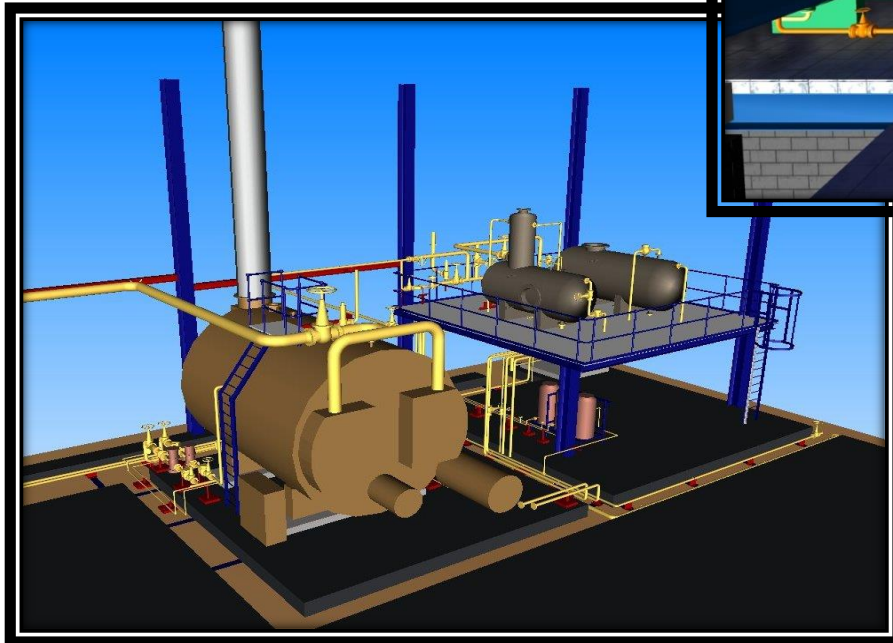
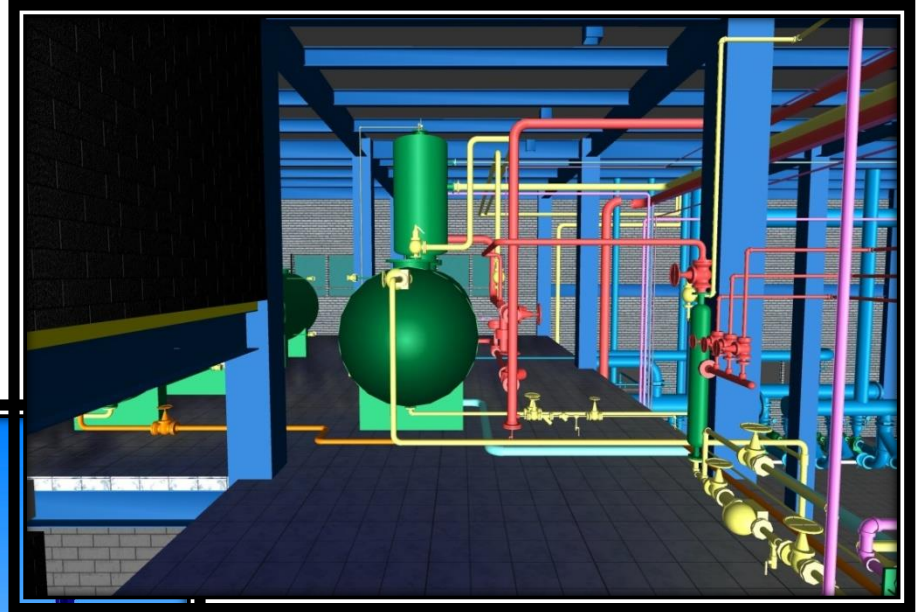
SARY MOGHAHNAK REFINERY



پروژه مخازن تعادلی نفت مغانک



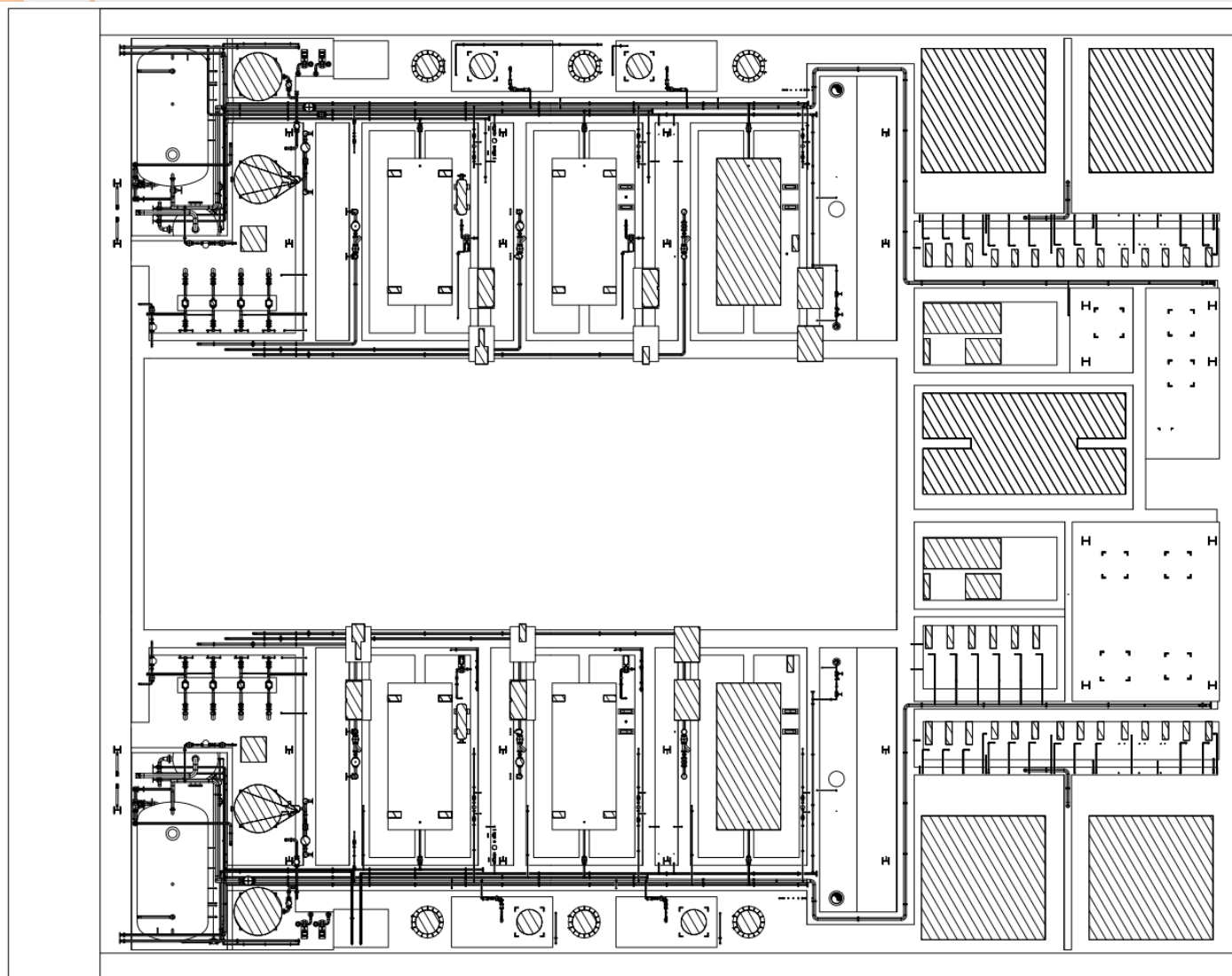
BIOSUN PHARMACUTICAL





پرتو فام گیان

GENERAL ARRANGEMENT





PIPING MATERIAL SPECIFICATION (PMS)

Contractor:	Client:	PROJECT: ZARNAM AUXILIARY BOILER ROOM					
		DOC. TITLE: PIPING MATERIAL SPECIFICATION					
		DOCUMENT CODE				PAGE 10 OF 33	
		PHASE	DISC	DOC. TYPE	SER. No.	REV. No.	DATE
		ED	PI	SPC	5100	A0	27.06.2015

Class No.: AN10
Base Material: Carbon Steel
Rating: Class 150(PN16)
Corrosion Allowance: 1 mm
Service: saturated & superheated steam, Condensate Water, Boiler Feed Water, Blowdown Water

Temperature °C	0	50	100	150	200	250	300	350	400
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Pressure Barg	19.6	19.2	17.6	15.8	13.9	12.0	10.2	8.3	6.5
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BRANCH CONNECTIONS 90 DEGREES BRANCH SIZE

Run	Size	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
600	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
500	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
450	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
400	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
350	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
300	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
250	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
200	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
150	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
125	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
100	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
80	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
65	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
50	C	C	C	C	C	C	F	F	F	F	F	F	D	D	D	D	D	D	D	A
40	B	B	B	B	B	E														
32	B	B	B	B	E															
25	B	B	B	E																
20	B	E																		
15	E																			

A Equal tee BW
B Reducing tee SW
C Socket
D Reducing Tee BW
E Equal tee SW
F Weldolet

Contractor:	Client:	PROJECT: ZARNAM AUXILIARY BOILER ROOM					
		DOC. TITLE: PIPING MATERIAL SPECIFICATION					
		DOCUMENT CODE				PAGE 11 OF 33	
		PHASE	DISC	DOC. TYPE	SER. No.	REV. No	DATE
پرو فام گیان	پرو فام گیان	ED	PI	SPC	5100	A0	27.06.2015

Designation	Size	General Design Description	Material	Standard
PIPE	1/2"-3/4"	SEAMLESS, SCH 80	API 5L Gr.B	ANSI B36.10
	1"-24"	SEAMLESS, SCH 40	API 5L Gr.B	ANSI B36.10
ELBOW 90	1/2"-11/2"	SW, LR	ASTM A105	ANSI B16.11
	2"-24"	BW, SCH40	ASTM A234 Gr.WPB	ANSI B16.9
ELBOW 45	1/2"-11/2"	SW, LR	ASTM A105	ANSI B16.11
	2"-24"	BW, SCH40	ASTM A234 Gr.WPB	ANSI B16.9
EQUAL TEE	1/2"-11/2"	SW	ASTM A105	ANSI B16.11
	2"-24"	BW, SCH40	ASTM A234 Gr.WPB	ANSI B16.9
RED. TEE	1/2"-11/2"	SW	ASTM A105	ANSI B16.11
	2"-24"	BW, SCH40	ASTM A234 Gr.WPB	ANSI B16.9
COUPLING & UNION	1/2"-11/2"	SW	ASTM A105	ANSI B16.11
	1/2"-11/2"	SW	ASTM A105	ANSI B16.11
CAP	2"-24"	BW, SCH40	ASTM A234 Gr.WPB	ANSI B16.9
ECC. REDUCER	3/4"-24"	BW, SCH40	ASTM A234 Gr.WPB	ANSI B16.9
CONC. REDUCER	3/4"-24"	BW, SCH40	ASTM A234 Gr.WPB	ANSI B16.9
FLANGE	1/2"-1 1/2"	SW	ASTM A105	DIN2633
WELD NECK FLANGE	1/2"-12"	PN16, RF	ASTM A105	DIN2633
SPECTACLE BLIND FLANGE	1/2"-24"	PN16, RF	ASTM A105	DIN2527, 2502
BLIND FLANGE	1/2"-24"	PN16, RF	ASTM A105	DIN2527
GASKET	1/2"-24"	PN16, 3 mm	Wired Graphite/ PTFE	DIN3535
NUT	10-33mm		ASTM A194 Gr.2H	ANSI B 18.2.2 DIN934



VALVE LIST

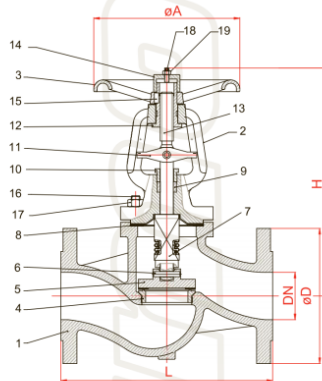
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												DOC. TITLE: STEAM VALVE LIST(MECHANICAL ROOM II)					
												DOCUMENT CODE					
												PHASE	DISC.	DOC. TYPE	SER. No.	REV. No	DATE: 1394/06/4
												ED	ME	LIS	5700	A1	
Item	Tag No.	Service	Type	Body Material	Connection Type	Rating	Size(mm)	Working Presssure (Barg)	Working Temperatur e (°C)	PID No.	Line No. / Equipment	Remark					
1	HV-001	Steam	Globe Valve(BL)	Ductile Iron	Flanged	PN25	200	12	191.61	110-ED-PR-PID-0200-02A0	HPS-0001-CN10-8"-IH						
2	HV-002	Steam	Globe Valve(BL)	Ductile Iron	Flanged	PN25	200	12	191.61	110-ED-PR-PID-0200-02A0	HPS-0002-CN10-8"-IH						
3	HV-003	Steam	Globe Valve(BL)	Ductile Iron	Flanged	PN25	200	12	191.61	110-ED-PR-PID-0200-02A0	HPS-0003-CN10-8"-IH						
4	HV-004	Steam	Globe Valve(BL)	Ductile Iron	Flanged	PN25	200	12	191.61	110-ED-PR-PID-0200-02A0	HPS-0007-CN10-8"-IH						
5	HV-005	Steam	Niddle Valve	Stainless Steel	Screwed	PN25	15	12	191.61	110-ED-PR-PID-0200-02A0	HPS-0004-CN10-16"-IH						
6	HV-006	Steam	Ball Valve	Stainless Steel	Screwed	PN25	15	12	191.61	110-ED-PR-PID-0200-02A0	TL-0001-CN10-1/2"-IH						
7	HV-007	Steam	Globe Valve(BL)	Ductile Iron	Flanged	PN25	250	12	191.61	110-ED-PR-PID-0200-02A0	HPS-0006-CN10-10"-IH						
8	HV-008	Steam	Niddle Valve	Stainless Steel	Screwed	PN25	15	12	191.61	110-ED-PR-PID-0200-02A0	HPS-0004-CN10-16"-IH						
9	HV-009	Steam	Globe Valve(BL)	Ductile Iron	Flanged	PN25	125	12	191.61	110-ED-PR-PID-0200-02A0	HPS-0008-CN10-5"-IH						
10	HV-010	Steam	Globe Valve(BL)	Cast Iron	Flanged	PN16	200	3	143.75	110-ED-PR-PID-0200-02A0	MPS-0001-AN10-8"-IH						
11	HV-011	Steam	Globe Valve(BL)	Ductile Iron	Flanged	PN25	125	12	191.61	110-ED-PR-PID-0200-02A0	HPS-0009-CN10-5"-IH						
12	HV-012	Steam	Globe Valve(BL)	Cast Iron	Flanged	PN16	200	3	143.75	110-ED-PR-PID-0200-02A0	MPS-0002-AN10-8"-IH						
13	HV-013	Steam	Globe Valve(BL)	Ductile Iron	Flanged	PN25	125	12	191.61	110-ED-PR-PID-0200-02A0	HPS-0010-CN10-5"-IH						
14	HV-014	Steam	Globe Valve(BL)	Cast Iron	Flanged	PN16	200	3	143.75	110-ED-PR-PID-0200-02A0	MPS-0003-AN10-8"-IH						
15	HV-015	Steam	Niddle Valve	Stainless Steel	Screwed	PN16	15	3	143.75	110-ED-PR-PID-0200-02A0	MPS-0005-AN10-16"-IH						
16	HV-016	Steam	Globe Valve(BL)	Cast Iron	Flanged	PN16	150	3	143.75	110-ED-PR-PID-0200-02A0	MPS-0010-AN10-6"-IH						
17	HV-018	Steam	Niddle Valve	Stainless Steel	Screwed	PN16	15	3	143.75	110-ED-PR-PID-0200-02A0	MPS-0005-AN10-16"-IH						
18	HV-019	Steam	Globe Valve(BL)	Cast Iron	Flanged	PN16	80	3	143.75	110-ED-PR-PID-0200-02A0	MPS-0015-AN10-3"-IH						
19	HV-020	Steam	Globe Valve(BL)	Cast Iron	Flanged	PN16	200	3	143.75	110-ED-PR-PID-0200-02A0	MPS-0018-AN10-8"-IH						
20	HV-021	Steam	Globe Valve(BL)	Cast Iron	Flanged	PN16	50	3	143.75	110-ED-PR-PID-0200-02A0	MPS-0006-AN10-2"-IH						
21	HV-022	Condensate	Globe Valve(BL)	Ductile Iron	Flanged	PN25	25	12	191.61	110-ED-PR-PID-0200-02A0	HPC-0001-AN10-1"-IH						
22	HV-023	Condensate	Globe Valve(BL)	Cast Iron	Flanged	PN16	25	0.5	100	110-ED-PR-PID-0200-02A0	HPC-0001-AN10-1"-IH						
23	HV-024	Condensate	Globe Valve(BL)	Ductile Iron	Flanged	PN25	25	12	191.61	110-ED-PR-PID-0200-02A0	HPC-0002-AN10-1"-IH						
24	HV-025	Condensate	Globe Valve(BL)	Cast Iron	Flanged	PN16	25	0.5	100	110-ED-PR-PID-0200-02A0	HPC-0002-AN10-1"-IH						
25	HV-026	Condensate	Globe Valve(BL)	Ductile Iron	Flanged	PN25	25	12	191.61	110-ED-PR-PID-0200-02A0	HPC-0003-AN10-1"-IH						
26	HV-027	Condensate	Globe Valve(BL)	Cast Iron	Flanged	PN16	25	0.5	100	110-ED-PR-PID-0200-02A0	HPC-0003-AN10-1"-IH						
27	HV-028	Condensate	Globe Valve(BL)	Ductile Iron	Flanged	PN25	20	12	191.61	110-ED-PR-PID-0200-02A0	HPC-0004-AN10-3/4"-IH						
28	HV-029	Condensate	Globe Valve(BL)	Cast Iron	Flanged	PN16	20	0.5	100	110-ED-PR-PID-0200-02A0	HPC-0004-AN10-3/4"-IH						
29	HV-030	Condensate	Globe Valve(BL)	Ductile Iron	Flanged	PN25	20	12	191.61	110-ED-PR-PID-0200-02A0	HPC-0005-AN10-3/4"-IH						
30	HV-031	Condensate	Globe Valve(BL)	Cast Iron	Flanged	PN16	20	0.5	100	110-ED-PR-PID-0200-02A0	HPC-0005-AN10-3/4"-IH						
31	HV-032	Condensate	Globe Valve(BL)	Cast Iron	Flanged	PN16	20	3	143.75	110-ED-PR-PID-0200-02A0	MPC-0001-AN10-3/4"-IH						
32	HV-033	Condensate	Globe Valve(BL)	Cast Iron	Flanged	PN16	20	0.5	100	110-ED-PR-PID-0200-02A0	MPC-0001-AN10-3/4"-IH						
33	HV-034	Condensate	Globe Valve(BL)	Cast Iron	Flanged	PN16	15	3	143.75	110-ED-PR-PID-0200-02A0	MPC-0002-AN10-1/2"-IH						
34	HV-035	Condensate	Globe Valve(BL)	Cast Iron	Flanged	PN16	15	0.5	100	110-ED-PR-PID-0200-02A0	MPC-0002-AN10-1/2"-IH						
35	HV-036	Steam	Globe Valve(BL)	Cast Iron	Flanged	PN16	25	3	143.75	110-ED-PR-PID-0200-02A0	MPS-0007-AN10-1"-IH						



DATA SHEETS

Metal Körüklü Vana
Bellows Sealed Valve

Tip / Type
PN25 / TMKV - 112



Boyutlar

Dimensions

PN	25															
DN / Size	15	20	25	32	40	50	65	80	100	125	150	200	250	300		
DN / Size	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"		
L	130	150	160	180	200	230	290	310	350	400	480	600	730	850		
H	230	230	248	248	268	268	312	366	400	463	488	559	701	714		
øA	120	120	160	160	200	195	195	250	325	360	360	525	525	525		
øD	95	105	115	140	150	165	185	200	235	250	285	340	395	445		
AĞIRLIK (kg)	7	8	9,2	13,5	15,6	22,5	37,8	48,5	65	92	134	196	395	475		

DN / Size	15	20	25	32	40	50	65	80	100	125	150	200	250	300
Kvs m³/h	5,4	9,6	15	24	37	57	95	141	218	316	430	723	1077	1575
ξ	4,7	4,6	4,7	4,6	4,8	4,7	4,8	5	4,9	4,9	4,9	5,2	5,4	5,8



SIEMENS

4³³⁰



**2-Port Seat Valves with
Flange, PN 16**

VVF40...

- Grey cast iron EN-GJL-250 valve body
- DN 15...150
- K_{vs} 1,9...315 m³/h
- Can be equipped with SQX... electromotoric or SKD...-, SKB...- and SKC...- electrohydraulic actuators

Use

For use in heating, ventilating, and air conditioning systems as a control or safety shutoff valve.
For closed circuits only (mind cavitation, refer to page 6).

CA1N4330en
21.09.2007

Building Technologies
HVAC Products



STRESS ANALYSIS

LOAD CASE DEFINITION KEY

CASE 5 (SUS) W+P1+H
CASE 6 (SUS) WNC+H
CASE 17 (OCC) L17=L12+L5
CASE 18 (OCC) L18=L13+L5
CASE 19 (OCC) L19=L14+L5
CASE 20 (OCC) L20=L15+L5
CASE 21 (OCC) L21=L16+L5
CASE 22 (EXP) L22=L4-L5

Piping Code: B31.3 = B31.3 -2012, Jan 10, 2013

*** CODE COMPLIANCE EVALUATION PASSED ***

Highest Stresses: (KPa)) 49.3 @Node 4504 LOADCASE: 22 (EXP) L22=L4-L5
Ratio (%): 164051.4 Allowable Stress: 332484.7
Code Stress: 15047.0 @Node 500 LOADCASE: 17 (OCC) L17=L12+L5
Axial Stress: 160642.6 @Node 4504 LOADCASE: 22 (EXP) L22=L4-L5
Bending Stress: 35255.8 @Node 600 LOADCASE: 22 (EXP) L22=L4-L5
Torsion Stress: 19641.0 @Node 30 LOADCASE: 5 (SUS) W+P1+H
Hoop Stress: 207190.5 @Node 5820 LOADCASE: 22 (EXP) L22=L4-L5
Max Stress Intensity:

Load Case	From Node	Code Stress KPa	Allowable Stress KPa	Ratio %	To Node	Code Stress KPa	Allowable Stress KPa	Ratio %	Piping Code
5(SUS)	10	9529.4	137357.2	6.9	30	9794.2	137357.2	7.1	B31.3
6(SUS)		0.0	137357.2	0.0		264.8	137357.2	0.2	B31.3
17(OCC)		9529.4	182685.1	5.2		9817.8	182685.1	5.4	B31.3
18(OCC)		9529.4	182685.1	5.2		9817.8	182685.1	5.4	B31.3
19(OCC)		9529.4	182685.1	5.2		9886.9	182685.1	5.4	B31.3
20(OCC)		9529.4	182685.1	5.2		9886.9	182685.1	5.4	B31.3
21(OCC)		9529.4	182685.1	5.2		9794.2	182685.1	5.4	B31.3
22(EXP)		0.0	334532.1	0.0		0.0	334267.2	0.0	B31.3
5(SUS)	30	9790.4	137357.2	7.1	50	11528.2	137357.2	8.4	B31.3
6(SUS)		268.7	137357.2	0.2		2006.5	137357.2	1.5	B31.3
17(OCC)		9826.8	182685.1	5.4		13182.8	182685.1	7.2	B31.3
18(OCC)		9831.3	182685.1	5.4		13221.7	182685.1	7.2	B31.3
19(OCC)		10018.7	182685.1	5.5		15095.5	182685.1	8.3	B31.3
20(OCC)		9953.9	182685.1	5.4		13492.7	182685.1	7.4	B31.3
21(OCC)		9791.3	182685.1	5.4		11582.8	182685.1	6.3	B31.3
		154.0	334271.1	0.0		2753.5	332533.3	0.8	B31.3



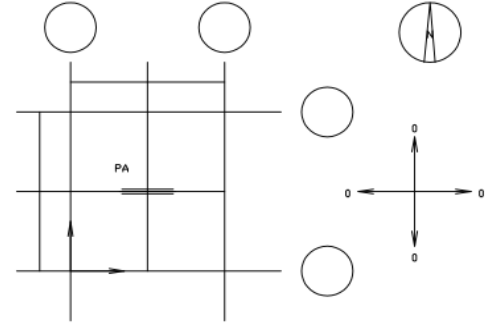
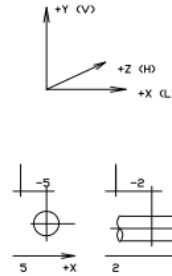
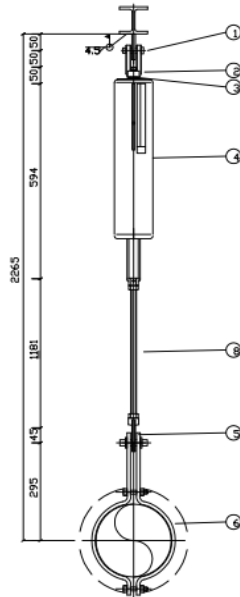
PIPE & FITTING MATERIAL TAKE OFF

Contractor:		PROJECT: ZARNAM CENTRAL MECHANICAL ROOM		CLIENT:	
		DOC. TITLE: SHORTAGE PIPE & FITTING MTO (MECHANICAL ROOM I&II)			
		DOCUMENT CODE: ED-PQ-MTO-5950-A1			
ITEM	UNIT	DESCRIPTION	SIZE	QTY	
1	BRANCH	ANSI B36.10 SEAMLESS SCH 40,APISL GR.B	8"	24	
2	BRANCH	ANSI B36.10 SEAMLESS SCH 40,APISL GR.B	6"	7	
3	BRANCH	ANSI B36.10 SEAMLESS SCH 40,APISL GR.B	5"	67	
4	BRANCH	ANSI B36.10 SEAMLESS SCH 40,APISL GR.B	4"	7	
5	BRANCH	ANSI B36.10 SEAMLESS SCH 40,APISL GR.B	3"	19	
6	BRANCH	ANSI B36.10 SEAMLESS SCH 40,APISL GR.B	2"	11	
7	BRANCH	ANSI B36.10 SEAMLESS SCH 40,APISL GR.B	11/2"	3	
8	BRANCH	ANSI B36.10 SEAMLESS SCH 40,APISL GR.B	11/4"	15	
9	BRANCH	ANSI B36.10 SEAMLESS SCH 40,APISL GR.B	1"	7	
10	NO.	ELBOW 90 ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	8"	10	
11	NO.	ELBOW 90 ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	5"	30	
12	NO.	ELBOW 90 ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	3"	45	
13	NO.	ELBOW 90 ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	21/2"	3	
14	NO.	ELBOW 90 ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	2"	23	
15	NO.	ELBOW 90 ANSI B16.11 SW LR,ASTM A105	11/2"	24	
16	NO.	ELBOW 90 ANSI B16.11 SW LR,ASTM A105	1"	57	
17	NO.	ELBOW 90 ANSI B16.11 SW LR,ASTM A105	1/2"	35	
18	NO.	ELBOW 45 ANSI B16.11 THREAD,ASTM A105 Hot Dip Galvanized	21/2"	2	
19	NO.	ELBOW 90 ANSI B16.11 THREAD,ASTM A105 Hot Dip Galvanized	2"	8	
20	NO.	EQUAL TEE ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	16"x16"	1	
21	NO.	EQUAL TEE ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	3"x3"	17	
22	NO.	EQUAL TEE ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	21/2"x21/2"	2	
23	NO.	EQUAL TEE ANSI B16.11 SW,ASTM A105	3/4"x3/4"	4	
24	NO.	REDUCING TEE ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	3"x21/2"	7	
25	NO.	REDUCING TEE ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	3"x2"	7	
26	NO.	REDUCING TEE ANSI B16.11 SW,ASTM A105	2"x11/2"	5	
27	NO.	REDUCING TEE ANSI B16.11 SW,ASTM A105	2"x1"	5	
28	NO.	REDUCING TEE ANSI B16.11 SW,ASTM A105	3/4"x1/2"	22	
29	NO.	SOCKOLET ANSI B16.11 SW,ASTM A105	12"x1/2"	1	
30	NO.	SOCKOLET ANSI B16.11 SW,ASTM A105	3"x11/2"	2	
31	NO.	SOCKOLET ANSI B16.11 SW,ASTM A105	3"x3/4"	14	
32	NO.	SOCKOLET ANSI B16.11 SW,ASTM A105	2"x1/2"	5	
33	NO.	CONC. REDUCER ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	5"x3"	1	
34	NO.	CONC. REDUCER ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	4"x11/2"	2	
35	NO.	CONC. REDUCER ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	3"x2"	8	
36	NO.	CONC. REDUCER ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	2"x11/2"	6	
37	NO.	CONC. REDUCER ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	2"x1"	12	
38	NO.	CONC. REDUCER ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	11/2"x3/4"	2	
39	NO.	ECC. REDUCER ANSI B16.9 BW SCH40,ASTM A234 GR.WPB	1"x1/2"	17	
40	NO.	CAP ANSI B16.9 BW SCH 40,ASTM A234 GR.WPB	3"	6	



پرتو فام گیان

SUPPORT DETAILS



8 Threaded rod	673413	(1181)	1	1.95	S235JRG2
7 Hexagonal nut	633928	M16	2	0.06	Gr. B
6 Three bolt clamp	432219	D219.1	1	5.00	S235
5 Eye nut	603912		1	0.20	P250GH
4 Var. spring hanger	213318		1	9.70	
3 Threaded stud	673113	50	1	0.07	S235JRG2
2 Clevis with pin	613312		1	0.40	P250GH
1 Weld-on eye plate	753112		1	0.24	S235JRG2

Pos. Designation Type [mm] Qty. [kg] Material

HS13-E2-2265-109925

FHD =	3.10	kN
FCD =	3.65	kN
FDP =	3.65	kN
FHDy =	4.90	kN
late =	5	mm
horz =	2	mm
vert =	29	mm
Ø OD =	219.1	mm
Insul =	50	mm
Temp =	192	°C
Delta F =	15	%
Rate =	16.7	N/mm
Tot Tvl	200	mm
Preset	119	mm
Tri Tvl =	29.01	mm
Tvl res dn/up	81/90	mm

Customer :

Plant / System :

P.D. N° :

Addenda N° :

Processori 09/10/2015

LISEGA Offer N° :

0-8-0 0

LICAD Draw N°

10 -3-62996

Rev 0

DPK-Co

Saleh

Drawing N° :

Center Spring - HPS-0007

Checked:



پرتو فام گیان

SUPPORT LIST

Contractor:			Client:			PROJECT: ZARNAM CENTRAL MECHANICAL ROOM	
DOC. TITLE: SUPPORT LIST(MECHANICAL ROOM I)			DOCUMENT CODE			DATE: 1394/07/19	
110-ED-ST-LIS-2400-A0							
Item	Line No.	Size	Support Type	Support Tag		Position	
1	HPS-0002-CN10-8"-IH/A	200	SPS	SPS-01		E 463770.03125 N 3997837 U 102514.914062	
2	HPS-0002-CN10-8"-IH/A	200	HS13	HS13-D2-1000-103515		E 463770.03125 N 3997837 U 102514.914062	
3	HPS-0003-CN10-8"-IH/A	200	SPS	SPS-01		E 463060.3125 N 3991337 U 102514.914062	
4	HPS-0003-CN10-8"-IH/A	200	HS13	HS13-D2-1000-103515		E 463060.3125 N 3991337 U 102514.914062	
5	HPS-0003-CN10-8"-IH/A	200	RS17	RS17-6"-C-400-1210-102305-90		E 463060.3125 N 3997837 U 102514.914062	
6	HPS-0003-CN10-8"-IH/A	200	S6	S6-8"-100-300-CS		E 463060.3125 N 3997837 U 102514.914062	
7	HPS-0003-CN10-8"-IH/A	200	GS1	GS1-8"		E 463060.3125 N 3997837 U 102514.914062	
8	HPS-0003-CN10-8"-IH/A	200	REFER	REFER TO HPS-0002-CN10-8"-IH		E 463060.3125 N 3997837 U 102514.914062	
9	HPS-0006-CN10-10"-IH/A	250	S6	S6-10"-145-300-CS		E 468719.75 N 4003640 U 106002.5	
10	HPS-0006-CN10-10"-IH/A	250	S6	S6-10"-145-300-CS		E 468719.75 N 4001707 U 106002.5	
11	HPS-0006-CN10-10"-IH/A	250	HD1	HD1-10" (3mm GAP)		E 468719.75 N 4001707 U 106002.5	
12	HPS-0006-CN10-10"-IH/A	250	S6	S6-10"-145-300-CS		E 468719.75 N 3997841 U 106002.5	
13	HPS-0006-CN10-10"-IH/A	250	GS1	GS1-10"		E 468719.75 N 3997841 U 106002.5	
14	HPS-0006-CN10-10"-IH/A	250	DS1	DS1-10"		E 468719.75 N 3997841 U 106002.5	
15	HPS-0006-CN10-10"-IH/A	250	S6	S6-10"-145-300-CS		E 468719.75 N 3993507 U 106002.5	
16	HPS-0006-CN10-10"-IH/A	250	GS1	GS1-10"		E 468719.75 N 3993507 U 106002.5	
17	HPS-0006-CN10-10"-IH/A	250	S6	S6-10"-145-300-CS		E 468719.75 N 3991340 U 106002.5	
18	HPS-0006-CN10-10"-IH/A	250	S6	S6-10"-145-300-CS		E 464913 N 3987114 U 106002.5	
19	HPS-0006-CN10-10"-IH/A	250	GS1	GS1-10"		E 464913 N 3987114 U 106002.5	
20	HPS-0006-CN10-10"-IH/A	250	S6	S6-10"-145-300-CS		E 464913 N 3982888 U 106002.5	
21	HPS-0006-CN10-10"-IH/A	250	GS1	GS1-10"		E 464913 N 3982888 U 106002.5	
22	HPS-0006-CN10-10"-IH/A	250	S6	S6-10"-145-300-CS		E 464913 N 3978354 U 106002.5	
23	HPS-0006-CN10-10"-IH/A	250	S6	S6-10"-145-300-CS		E 464913 N 3976087 U 106002.5	
24	HPS-0006-CN10-10"-IH/A	250	GS1	GS1-10"		E 464913 N 3976087 U 106002.5	
25	HPS-0006-CN10-10"-IH/A	250	DS1	DS1-10"		E 464913 N 3976087 U 106002.5	
26	MPS-0015-AN10-3"-IH/A	80	GS21	GS21-3"-B-229-103236		E 470981.875 N 4005743 U 103186	
27	MPS-0015-AN10-3"-IH/A	80	GS8	GS8-3"-C-CS-103186		E 470981.875 N 4005743 U 103186	
28	MPS-0015-AN10-3"-IH/A	80	S6	S6-3"-150-300-CS		E 469353.25 N 4003640 U 105910.5	
29	MPS-0015-AN10-3"-IH/A	80	HD1	HD1-3" (3mm GAP)		E 469353.25 N 4003640 U 105910.5	
30	MPS-0015-AN10-3"-IH/A	80	S6	S6-3"-150-300-CS		E 469353.25 N 4001707 U 105910.5	
31	MPS-0015-AN10-3"-IH/A	80	GS1	GS1-3"		E 469353.25 N 4001707 U 105910.5	
32	MPS-0015-AN10-3"-IH/A	80	S6	S6-3"-150-300-CS		E 469353.25 N 3997841 U 105910.5	
33	MPS-0015-AN10-3"-IH/A	80	GS1	GS1-3"		E 469353.25 N 3997841 U 105910.5	
34	MPS-0015-AN10-3"-IH/A	80	DS1	DS1-3"		E 469353.25 N 3997841 U 105910.5	
35	MPS-0015-AN10-3"-IH/A	80	S6	S6-3"-150-300-CS		E 469353.25 N 3995674 U 105910.5	
36	MPS-0015-AN10-3"-IH/A	80	GS1	GS1-3"		E 469353.25 N 3995674 U 105910.5	

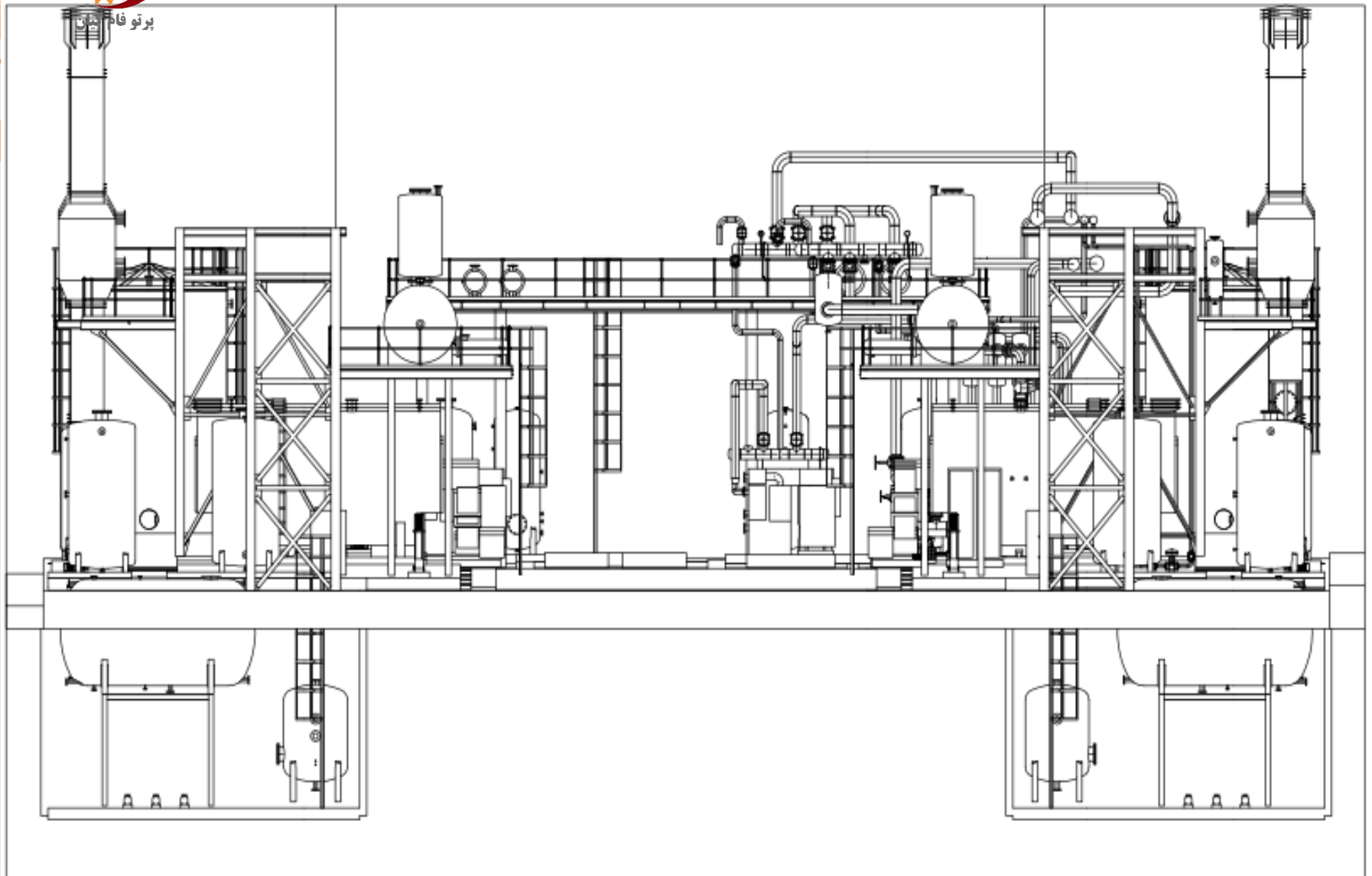


SUPPORT MTO

Contractor:		PROJECT: ZARNAM CENTRAL MECHANICAL ROOM		CLIENT:	
 پرتو فام گیان		DOC. TITLE: SHORTAGE SUPPORT MTO (MECHANICAL ROOM I&II)		 گروه صنعتی و پژوهشی فروردین زار نام (پارس تاسیس)	
		DOCUMENT CODE: ED-PG-MTO-5960-A0			
ITEM	UNIT	DESCRIPTION	SIZE	QTY	
1	BRANCH	ANSI B36.10 SEAMLESS SCH 40,API5L GR.B	8"	1	
2	BRANCH	ANSI B36.10 SEAMLESS SCH 40,API5L GR.B	6"	2	
3	BRANCH	ANSI B36.10 SEAMLESS SCH 40,API5L GR.B	4"	9	
4	BRANCH	ANSI B36.10 SEAMLESS SCH 40,API5L GR.B	2"	3	
5	BRANCH	ANSI B36.10 SEAMLESS SCH 40,API5L GR.B	11/2"	3	
6	6m Length	Profile, Angle 60, ST37-2	60x60x6	10	
7	6m Length	Profile, Angle 70, ST37-2	70x70x7	32	
8	6m Length	Profile, Angle 80, ST37-2	80x80x8	30	
9	6m Length	Profile, UNP 100, ST37-2	100x50x6x8.5	12	
10	6m Length	Profile, UNP 140, ST37-2	140x60x7x10	28	
11	6m Length	Profile, UNP 160, ST37-2	160x70x7x10	17	
12	6m Length	Profile, HEB 120, ST37-2	120x120x6.5x11	40	
13	6m Length	Profile, HEB 160, ST37-2	160x160x8x13	10	
14	6m Length	Profile, HEB 200, ST37-2	200x200x9x15	4	
15	PCS	PLATE, ST37-2	500mm x 500m x 6mm	5	
16	PCS	PLATE, ST37-2	140mm x 140m x 6mm	165	
17	PCS	PLATE, ST37-2	160mm x 160m x 6mm	48	
18	PCS	PLATE, ST37-2	200mm x 200mm x10mm	180	
19	PCS	PLATE, ST37-2	300mm x 300mm x10mm	90	
20	PCS	PLATE, ST37-2	500mm x 250mm x12mm	25	
21	PCS	PLATE, ST37-2	350mm x350mm x15mm	12	
22	PCS	PLATE, ST37-2	400mm x400mm x15mm	22	
23	PCS	PLATE, ST37-2	500mm x500mm x15mm	10	
24	PCS	PLATE, ST37-2	600mm x600mm x15mm	25	
25	NO.	U-Bolt with4 Nuts	3"	50	
26	NO.	Clamp with 2 set of Bolt& Nuts	1"	15	
27	NO.	Clamp with 2 set of Bolt& Nuts	1 1/4"	60	
28	NO.	Clamp with 2 set of Bolt& Nuts	1 1/2"	40	
29	NO.	Clamp with 2 set of Bolt& Nuts	2"	22	
30	NO.	Clamp with 2 set of Bolt& Nuts	2 1/2"	55	
31	NO.	Clamp with 2 set of Bolt& Nuts	3"	25	
32	NO.	Clamp with 2 set of Bolt& Nuts	4"	55	
33	NO.	Anchor Bolt, Chemical Bolt HILTI (HVU/HAS)	M10 x 165	750	



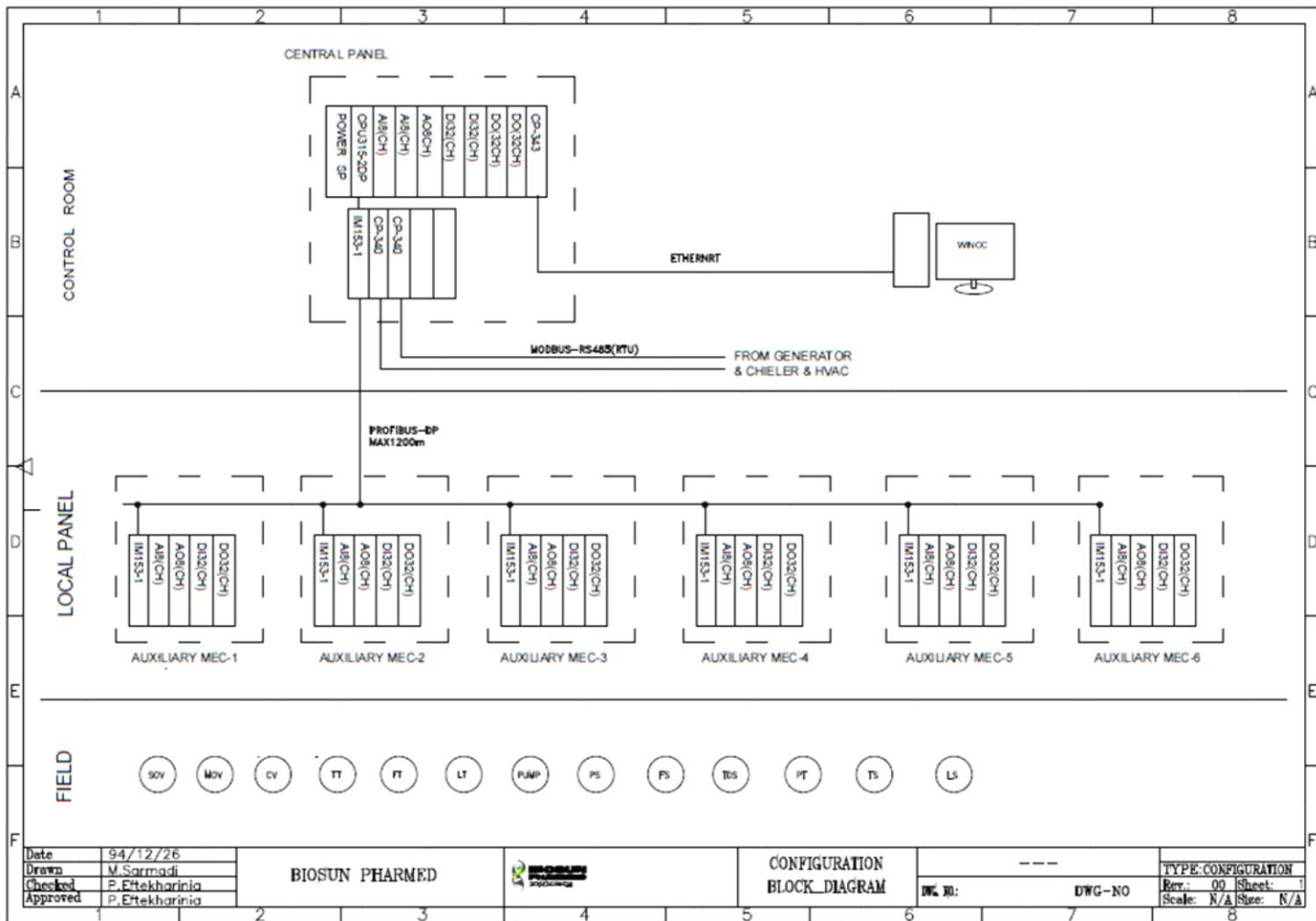
EQUIPMENT PLAN







CONTROL SYSTEM





COMI KOF 2121 EIAI

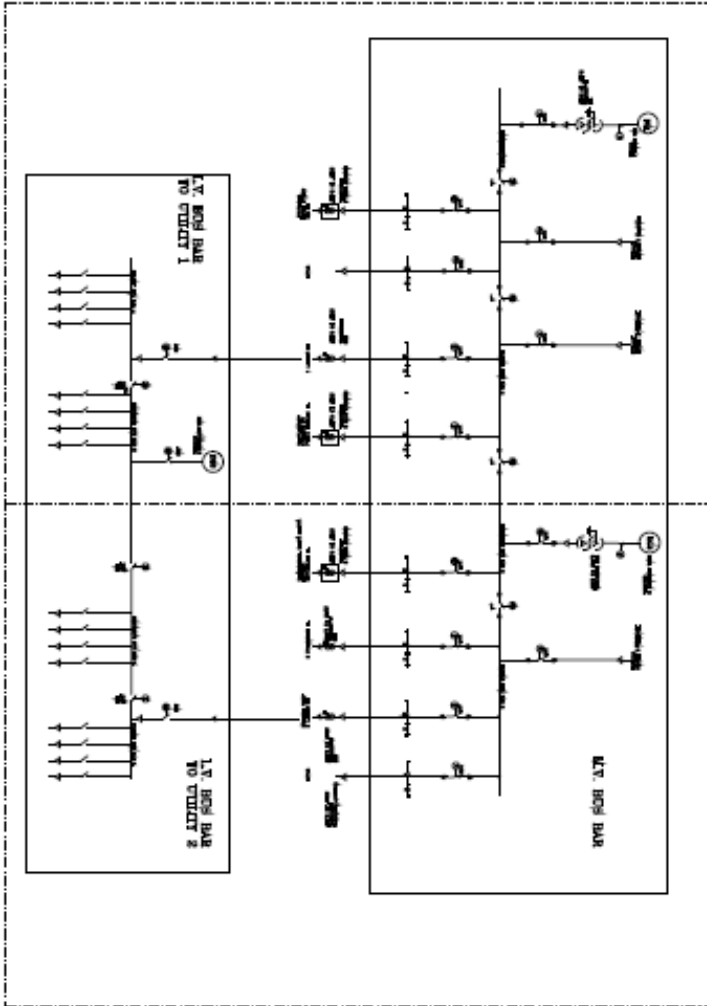
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M.S.A

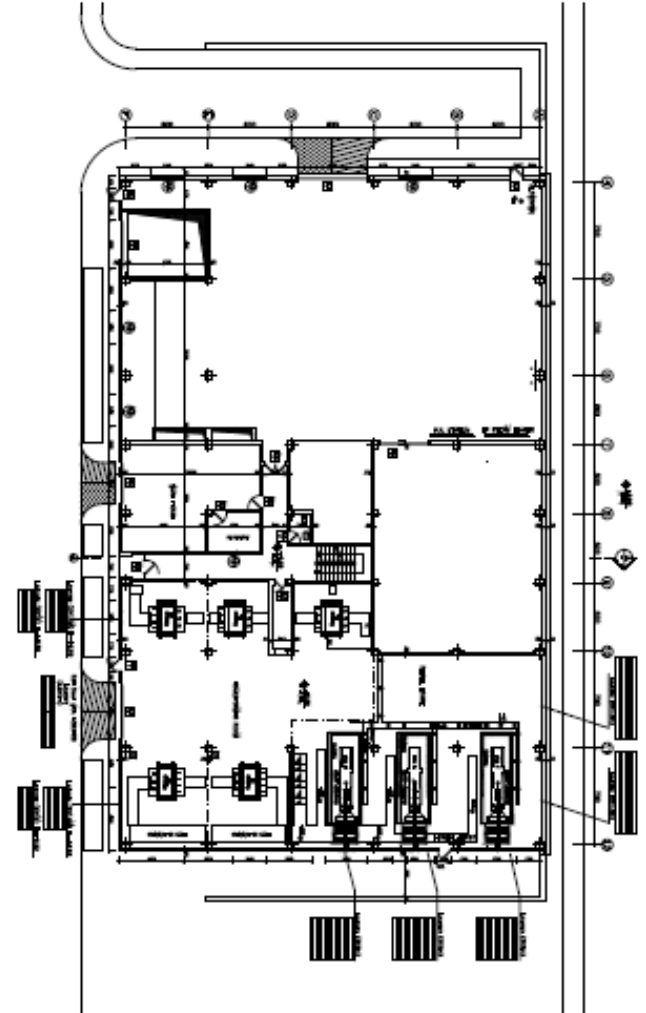
ELECTRIC SYSTEM

PHASE 1

PHASE 2



FIRST FLOOR EQUIPMENT ARRANGEMENT
(GROUND FLOOR PLAN)





WATER TREATMENT



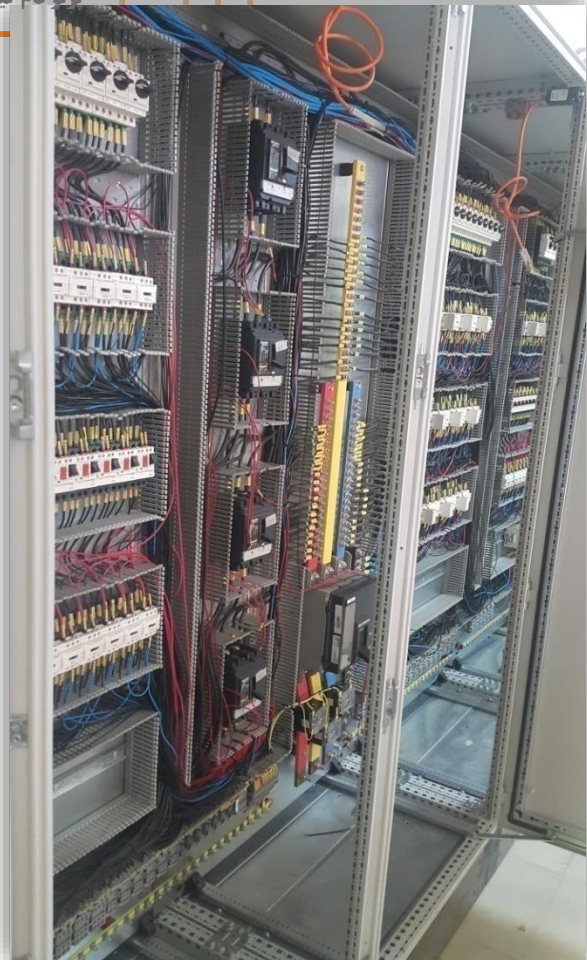


SPECIAL PACKAGES





ELECTRICAL PANELS





پرتو فام کیان

ELECTRICAL PANELS





BMS & CONTROL PANELS



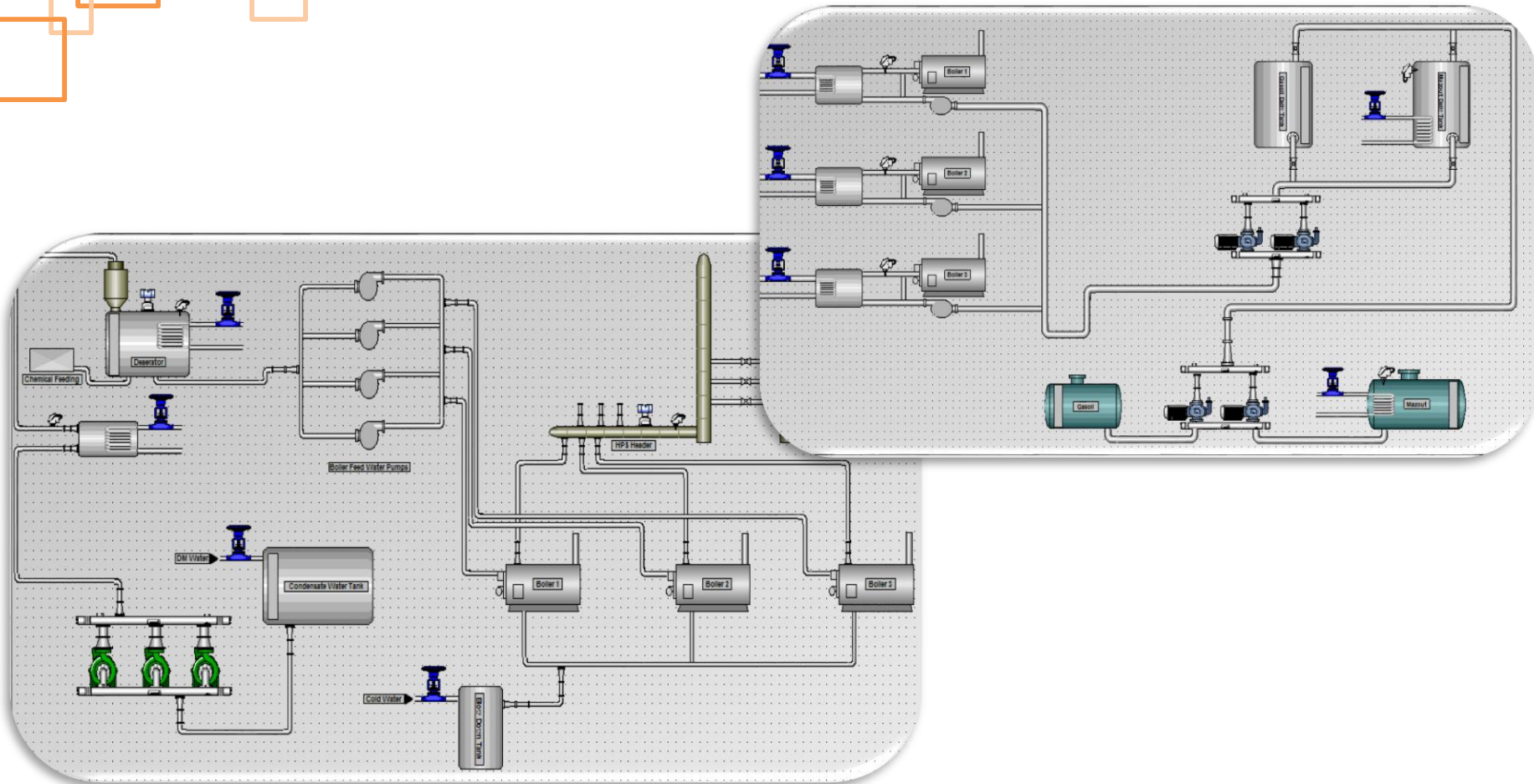


BMS & CONTROL PANELS





CONTROL SYSTEM PROGRAMMING



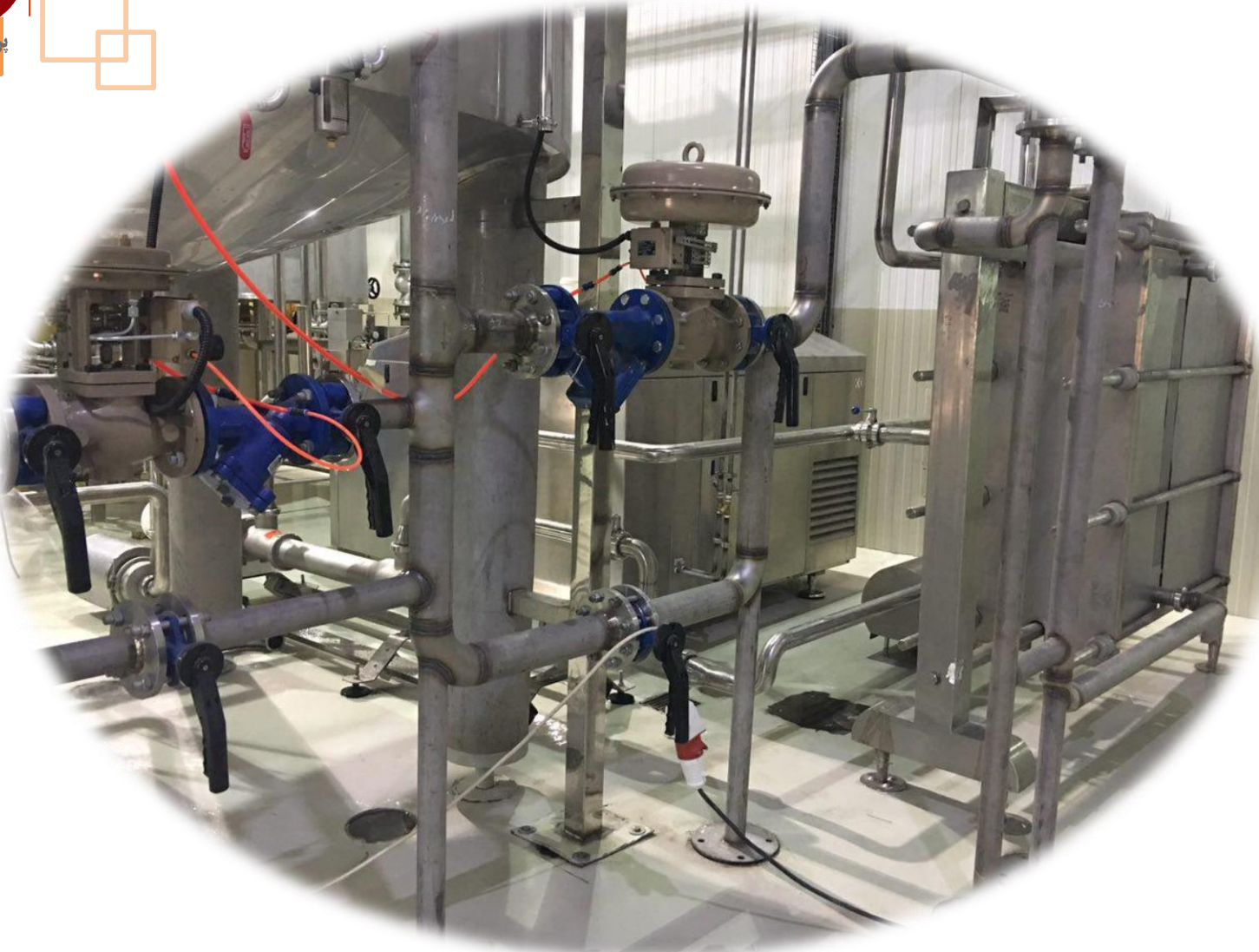


SOME OF PROJECTS IN IRAQ





KALLE KARBALA









پترو فام کیان



M.S.A





AL-MILLAD UHT MILK BAGHDAD





FESTOGHEH SODA DRINKS BAGHDAD



ZOHRAT AL-KHALIJ HILLEH





ZOHRAT AL-KHALIJ HILLEH



vana ve armatürleri



Gedik

M.S.A



ZOHRAT AL-KHALIJ HILLEH





ZOHRAT AL-KHALIJ HILLEH





SWISS ROSE FACTORY ERBIL



Swiss Care
+ SWISS TECHNOLOGY



SWISS DENT
+ SWISS TECHNOLOGY FOR DAILY PROTECTION





SWISS ROSE FACTORY ERBIL





HONABAGHDAD SODA & JUICE FACTORY BAGHDAD



08/15/2022 13:29