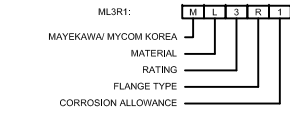


INSTRUMENT NUMBERING
EACH INSTRUMENT HAS BEEN NAMED AS SHOWN BELOW IN THE DOCUMENTATION:
TAG-RU0001X-AA
WHERE:
X : ONE DIGITS, WHICH IDENTIFY THE REFRIGERANT PACKAGE TRAIN (A OR B)
TAG : INSTRUMENT TAG (ATTACHMENT: P&ID SYMBOLS)
AA : TWO DIGITS, WHICH IS THE PROGRESSIVE ITEM NUMBER IN THE UNIT FROM 01 TO 99.

MOTOR INSTRUMENT NUMBERING
IF AN INSTRUMENT OR A FUNCTION IS INSTALLED ON A ELECTRIC DRIVER OF A MACHINERY WHICH NAME IS TAG-RU0001X-AA, THE INSTRUMENT NAME IS: TAG-RU0001X-AA

PIPE LINE NUMBERING
DN-AMP-RU0001YXXMLR1-C

WHERE:
DN : NOMINAL DIAMETER IN INCH
MP : FLUID CODE
RU0001 : PACKAGE NAME
Y : PACKAGE TRAIN (A OR B)
X : LETTER WHICH IDENTIFIES THE LINE NUMBER



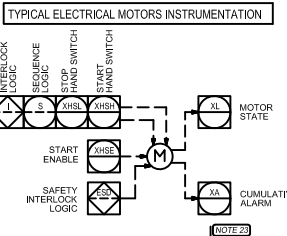
Rating: 1=1500 CLASS 3=300 CLASS 6=600 CLASS 9=900 CLASS 15=1500 CLASS
MATERIAL: C: CARBON STEEL L: LOW TEMPERATURE CARBON STEEL S: STAINLESS STEEL I: INSTRUMENT AIR STAINLESS STEEL
FLANGE TYPE: R = RAISED FACE F = FLAT FACE R = RING TYPE JOINT J = LARGE MALE/FEMALE S = SMALL L TONGUE/GROOVE
CORROSION ALLOWANCE: 0 = 0 mm 1 = 1.5 mm 2 = 3.0 mm

FLUID CODE:	DESCRIPTION
AV	Atmospheric Vent
CWS	Cooling Water Supply
CWR	Cooling Water Return
FWG	Flare/Vent gas
IA	Instrument Air
OI	Hydraulic Oil
ST	Styrene
PR	Propane

Instrument line and function symbols			
HARDWARE		SOFTWARE	
Symbol	Denomination	Symbol	Denomination
	Locally mounted		Field mounted, shared display, shared control
	Mounted on back panel		Function normally inaccessible to operator and installed in main control room
	Mounted in main control room		Function normally accessible to operator and installed in main control room
	Mounted on back panel in auxiliary control room or on local panel		Function normally inaccessible to operator and installed in auxiliary control room or on local panel
	Mounted on panel in auxiliary control room or on local panel		Function normally accessible to operator and installed in auxiliary control room or on local panel
	Filed relay		Software Interloc logic: normally inaccessible to operator and installed in main control room
	Back panel relay in auxiliary control room or on local panel		Sequential logic functions
	Mounted on back panel		Safety interlock logic
	Star indicated that the instrument is supplied by package manufacturer		Package Control System PLC
	SIGNAL LIGHT		
	Foundation Fieldbus		
	Differential between two value + Upper Value - Lower value		

INSULATION AND TRACING CODES

A : ACOUSTIC INSULATION
H : HOT INSULATION
C : COLD INSULATION
P : PERSONNEL PROTECTION (FROM 60°C AND ABOVE)
FS : FIRE SAFE PROTECTION
T : STEAM TRACING
TW : HOT OIL TRACING
TC : HOT WATER TRACING
E : ELECTRICAL TRACING
JT : TOTAL JACKETED LINE
JR : REDUCED JACKETED LINE
JP : PARTIAL JACKETED LINE
F : ANTI FREEZING
D : DUAL INSULATION
B : SOLAR PROTECTION
K : ANTI CONDENSATION
AC : COLD AND ACOUSTIC INSULATION
AH : HOT AND ACOUSTIC INSULATION
N : NOT INSULATED
W : TAPE WRAPPED (UNDERGROUND LINES)



Piping and relevant components

Symbol	Denomination	Symbol	Denomination
	Main process		Female Connection
	Secondary process		Male Connection
	Utility		Flange Connection
	Jacket		Manhole
	Electrical Heat Tracing/Insulated		Female nitrogen service
	Hydraulic System Tubing (1/2" SS)		Male nitrogen service
	Electrical Heat Tracing Tubing (Insulated)		Cone Type strainer
	Blind flange		Temporary strainer
	Cap (butt weld)		Y-Strainer
	Reducer (Top flat)		T-Strainer
	Reducer (Concentric)		Ring spade
	Sample connection		Spectacle blind - normally closed
	Sample Point		Spectacle blind - normally open
	Gate or generic valve		Ring spacer
	Check Valve		Process vent and drains
	Stop Check Valve		With gate or generic valve
	Globe or disc Valve		Discharge to atmosphere
	Ball Valve (FULL BORE)		Downward
	Ball Valve (REDUCED BORE)		Upward
	Three-way Valve		Lateral
	Spring Valve		Expansion joint
	Locked Close Valve		Normally open valve
	Locked Open Valve		Normally closed valve
	Normally open valve		Car seal open valve
	Normally closed valve		Car seal closed valve
	Tight Shut Off Valve		Sight glass
	Pipe line class change		Pipe line class change

Instrument identification

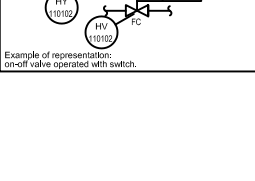
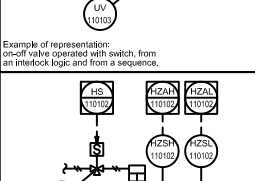
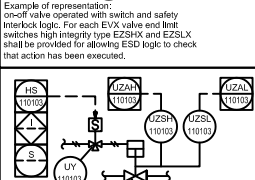
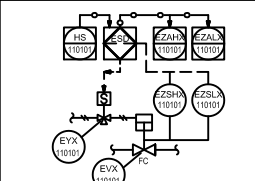
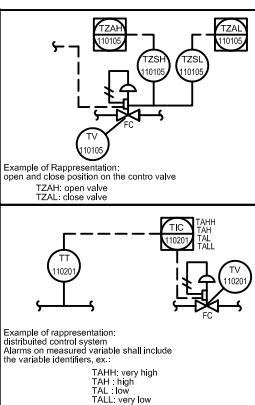
Symbol	Denomination
	Instrument tap on line
	Pressure tap with manifold valve
	Pressure tap with generic valves
	Pressure tap diaphragm type
	Fixed restriction orifice
	Primary flow element with transmitter
	Automatic regulator with integral flow indication
	Handwired for automatic valves (valve with actuators)
	Diaphragm, spring-opposed
	spring-opposed single-acting
	Cylinder, spring-opposed double-acting
	Rotary motor
	Solenoid
	Solenoid valve with manual reset
	Hand actuator
	Butterfly Valve
	Pressure relief or safety valve
	Temperature relief or safety valve
	Two-Way Valve Fail Open
	Two-Way Valve Fail Close
	Two-way valve fail locked
	three-way valve fail open to path A-C
	MAGNETIC LEVEL GAUGE
	LEVEL TRANSMITTER WITH DIAPHRAGM SEPARATOR WITH EXTENSION
	Open
	Close

FLOW INSTRUMENTS

Symbol	Denomination	Symbol	Denomination
	SIGHT FLOW GLASS		FLOW TURBINE TYPE
	ORIFICE PLATE WITH TRANSMITTER		METER RUN
	ROTAMETER		INTEGRAL FLOW ORIFICE ASSEMBLY
	VENTURI		FLOW POSITIVE DISPLACEMENT TYPE
	FLOW NOZZLE		PITOT OR ANUBAR WITH TRANSMITTER
	TRANSMITTER		FLOW RESTRICTION ORIFICE
	MAGNETIC		THERMAL FLOWMETER
	VORTEX		
	CORIOLIS		
	ULTRASONIC		

TYPICAL INSTALLATION FOR PI-PIT

Symbol	Denomination
	REMOVABLE SPOOL PIECE
	INSULATION KIT
	Connected sheet No. for Process Flow Diagram and P&ID
	Connected sheet No. for utilities P&ID
	Utility fluid code for P&ID utilities
	Steam trap
	FREE DRAINING
	Jacketed lines: they are marked with a double identification, one regarding the jacketed line and the other are regarding the jacket
	Supply battery limit
	Tie In Point
	CUSTOMER VENDOR
	INDICATED ON P&ID
	ACTUAL



Symbol	Denomination	Abbreviation
	CARTRIDGE Filter	FT
	Basket Filter	FT
	Surge Element	TST
	Coalescer	D
	Decanter	D
	Compressor Screw	C
	Vertical Shell & Tube Exchanger	E
	Pump Reciprocating	P
	Ejector	EJ
	Absorber	AE

REFERENCE DRAWING | **DWG NO.** | **REV.**

NOTES :

- AN ADDITIONAL "X" AFTER THE INSTRUMENT CODE MEANS THAT INSTRUMENT BELONGS TO ESD SYSTEM.
- FOR TEMPERATURE MEASURING INSTRUMENTS WHOSE SIGNAL HAS TO BE ROUTED TO A REMOTE SYSTEM (DCS, PLC), THE TRANSMITTER HAS BEEN ALWAYS INDICATED EVEN IF IT IS STRICTLY REQUIRED ONLY FOR CONTROL LOOPS, PROCESS INTERLOCKS AND SAFETY INTERLOCKS, IN CASE OF TEMPERATURE INDICATOR.
- IN ALL THE P&ID, PACKAGES ARE REPRESENTED IN A SIMPLIFIED WAY, IN GENERAL, WHAT IS REPRESENTED IS LICENSOR MINIMUM REQUIREMENT. THE CHARACTERISTICS OF EACH PACKAGE ARE DESCRIBED IN THE RELEVANT DATA SHEET. IN ANY CASE, PACKAGES VENDORS SHALL SUPPLY FINAL P&ID.
- FOR PIPES CARRYING THE FOLLOWING FLUIDS :
- EB (ETHYLENIZENE)
- AN (ACRYLONITRILE)
- CD (ORGANIC LIQUID CONDENSATE)
- ST (STYRENE)
- BD (BUTADIENE)
THE NUMBER OF FLANGES SHALL BE MINIMIZED.
- INSTALL DRAINS ON THE PIPING CIRCUITS (OR SINGLE LINES) LOWEST POINTS AND VENTS IN THE PIPING CIRCUITS (OR SINGLE LINES) HIGHEST POINTS.
- MINIMIZE FLANGED COUPLINGS ON HOT/THERMAL OIL (HO) MAIN DISTRIBUTION HEADER LINES. FOR THERMAL OIL (HO, CO) LINES INSTALLED ON PIPE RACKS, FLANGED COUPLINGS SHALL BE EQUIPPED WITH SAFE-RING OR EQUIVALENT FLANGES JOINTS SPRAY PROTECTION.
- WHEN AN INTERLOCK OR A SEQUENCE REQUIRES TO PERFORM AN ACTION, THE INTERLOCK OR SEQUENCE ITSELF SHALL VERIFY IF THE ACTION HAS BEEN DONE. THIS HAS TO BE CONSIDERED AS STANDARD INSTALLATION AND IS NOT REPRESENTED ON P&ID.
- IN GENERAL ON P&IDs SEQUENCES CHECK PHASE IS NOT REPRESENTED EXCEPT FOR: - RBBR PLANT; RUBBER DISSOLUTION SECTION - RUBBER PLANT; REACTION SECTION
- THE SIZE OF CONTROL VALVES BY-PASS VALVES WILL BE DEFINED / CONFIRMED ACCORDING TO THE FINAL SIZE OF CONTROL VALVES.
- IN CASE DRIP RING IS INDICATED ON P&ID, IT SHALL BE SUPPLIED BY PIPING VENDOR. FOR DRIP RING TYPICAL SEE DOC. J-80/85/88-IN-STD-1500-0001 "DRIP RING FOR DIAPHRAGM INSTRUMENT TYPICAL".
- THE INSTALLATION OF ALL PI-PIT-TI REPRESENTED ON P&ID IS INDICATED IN THE TYPICAL.
- ALL SIGNALS FROM PLC TO ESD SHALL BE HARD-WIRED (NON-DATALINK)
- ALL SIGNALS FROM UNIT 88 INSTRUMENTS SHALL BE CONNECTED TO DCS /FCS /ESD OF RUBBER PLANT.
- ALL VALVES ON PSV INLET /OUTLET LINES SHALL BE FULL BORE TYPE. GATE VALVE ON FLARE LINE TO BE INSTALLED WITH STEM IN HORIZONTAL POSITION.
- FOR SPECIAL PIPING ITEMS LIST REFER TO DOC. J-85-PI-LSC-8501.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
- ELEVATION SHOWN ARE ABOVE THE HIGHEST POINT OF PAVING.
- ALL VALVES ARE LINE SIZE UNLESS OTHERWISE SHOWN.
- THIS FLOW DIAGRAM IS DIAGRAMMATIC ONLY. DESIGN OF PIPE LINE MUST BE INVESTIGATED FOR VENTING OF GAS AND VAPOR POCKETS IN PIPING AND EQUIPMENT, LOW POINTS IN PIPING, PUMPS AND EQUIPMENT FOR DRAINING AND ACCESSIBILITY OF ALL VALVES, FLANGES AND INSTRUMENTS INCLUDING THERMOCOUPLES ETC.
- ALL ELECTRONIC INSTRUMENTATION SHALL BE INSTALLED AWAY FROM STEAM LINES AND HIGH TEMPERATURE HEAT SOURCE.
- SAMPLE TAPING FOR GAS SAMPLES SHALL BE FROM THE TOP OF THE MAIN LINE. FOR LIQUID SAMPLES TAPPING SHALL BE DONE FROM THE SIDE.
- EXCEPT FOR PROCESS REASONS, LOW POINT DRAINS AND HIGH POINT VENT ARE NOT SHOWN.
- CABLING BETWEEN DCS REMOTE I/O CARDS IN MCC CUBICLE CABINET AND MAIN CONTROL ROOM WILL BE VIA SOFT LINK EXCEPT FOR ESD SIGNALS TO MCC THAT WOULD BE HARD WIRED.
- ESDL MEANS EARTHING SWITCH LINK.
- SIGNALS OF CURRENT TRANSMITTERS ARE TAKEN FROM MCC.
- WHILE PURGING THE EQUIPMENTS, VENTS SHALL BE PROPERLY KEPT OPEN IN ORDER TO AVOID EQUIPMENT PRESSURIZATION ABOVE EQUIPMENT DESIGN/PSV SET PRESSURE BY MAINTAINING PROPER ADMINISTRATIVE CONTROL. PRESSURE SAFETY VALVES AND RUPTURE DISCS ARE NOT DESIGNED FOR THE MAXIMUM PURGING CONDITION MENTIONED IN THE LICENSOR PDP DATA.

HOLDEE:

EQUIPMENT LIST:

REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
03	FEB-2025	AS BUILT	A.K	F.SH	A.M
02	OCT-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
01	AUG-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
00	JUL-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M

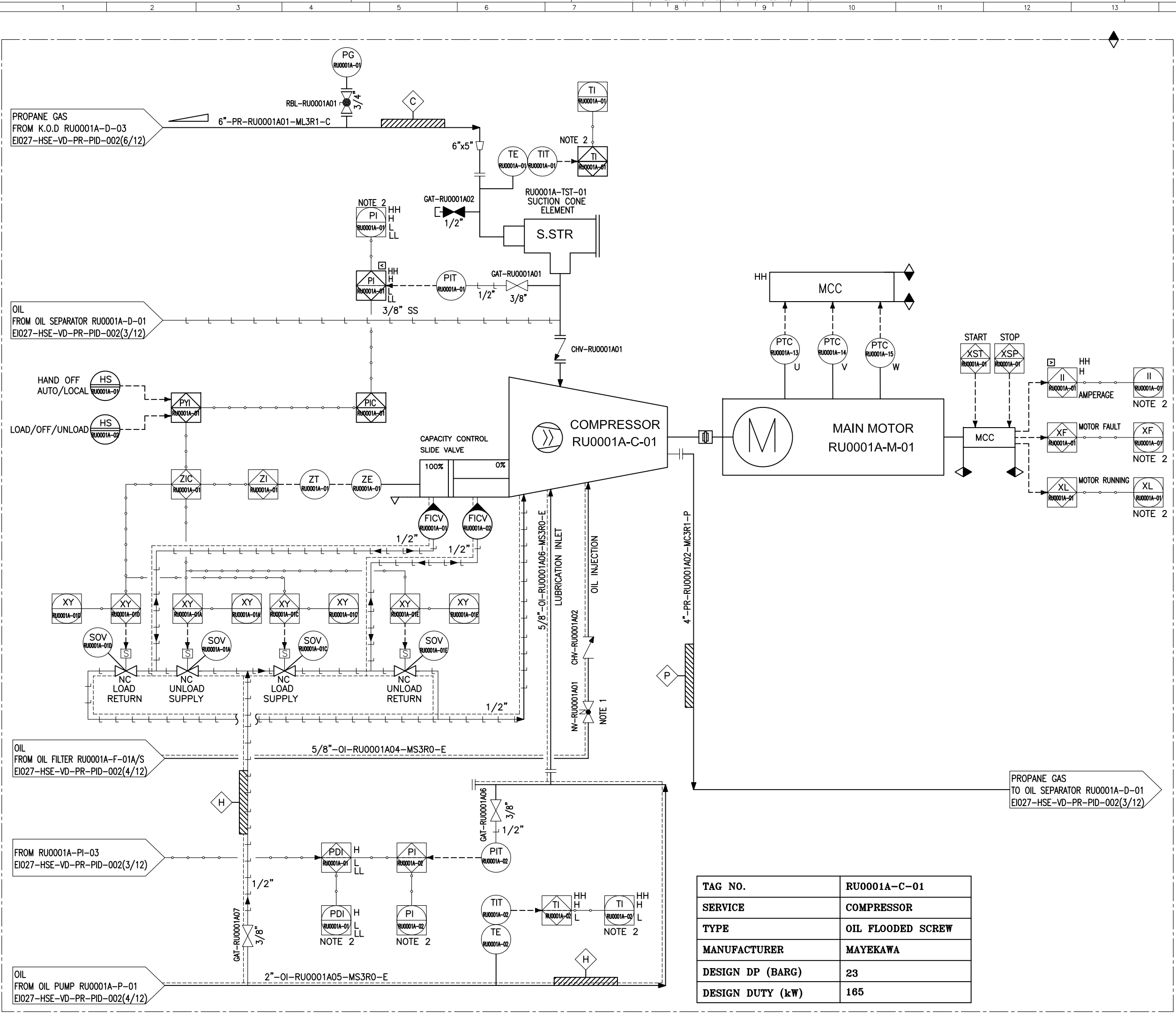
CLIENT

CONSULTING ENGINEER

PROJECT: STYRENE PARK OFFSITE

DRAWING TITLE: PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU SYMBOL, ABBREVIATION AND GENERAL NOTES

DRAWING NO.	REV.	SIZE	SCALE	SHEET
EI027-HSB-YD-PR-PID-002	03	A3	NTC	1 of 12



REFERENCE DRAWING: 15, 16

DWG NO.: , REV.:

NOTES :

- 1- OPENING DEGREE TO BE SET DURING COMMISSIONING AND LOGGED.
- 2- SIGNALS ROUT TO DCS.
- 3- MAINTAIN TEMPERATURE FOR ELECTRICAL INSULATIONS IS 30°C.

LEGEND:

VENDOR CUSTOMER

HOLDE:

EQUIPMENT LIST:

KEY PLAN :

REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
03	FEB-2025	AS BUILT	A.K	F.SH	A.M
02	OCT-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
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00	JUL-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M

CLIENT:

CONSULTING ENGINEER:

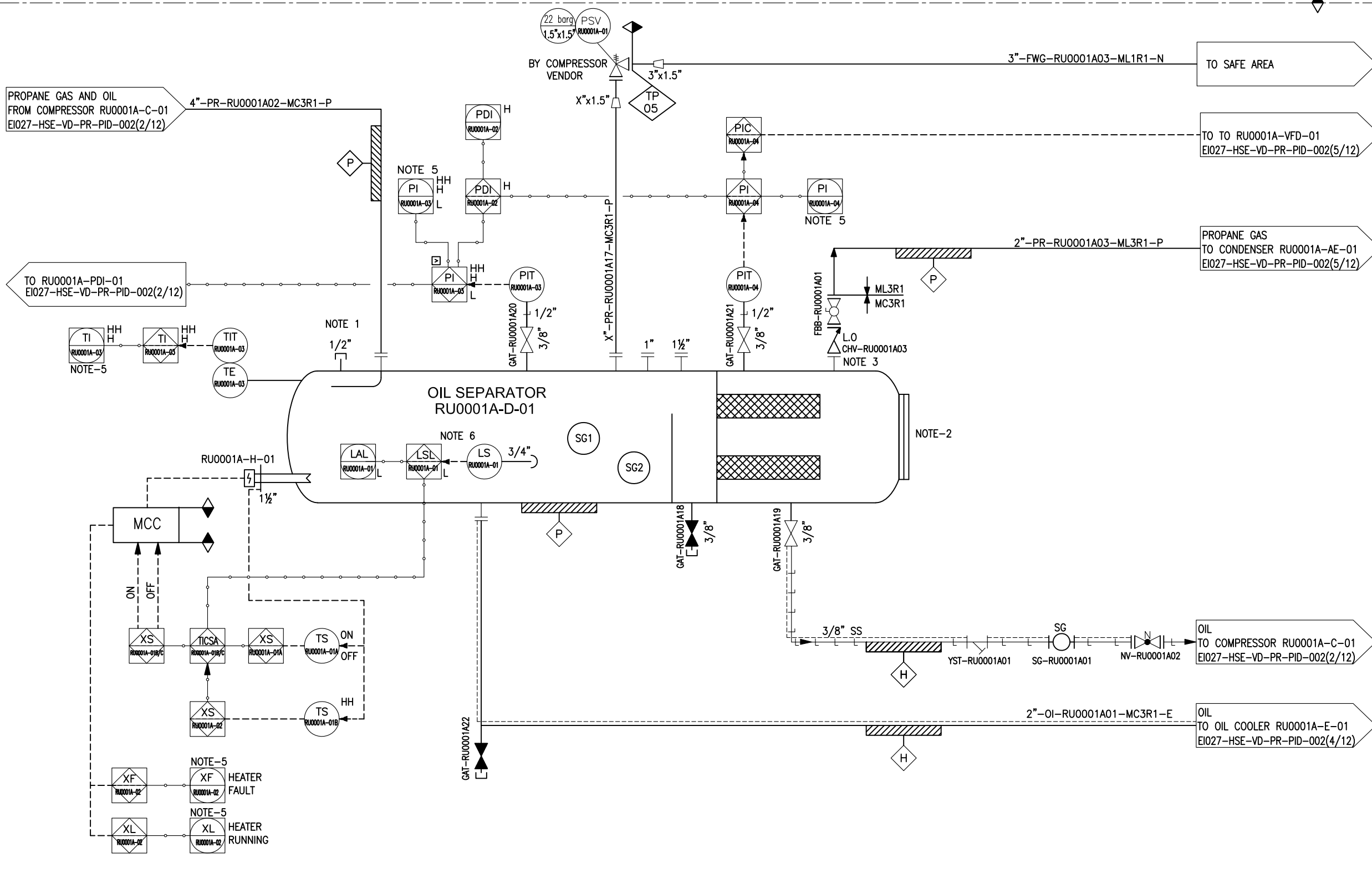
PROJECT: **STYRENE PARK OFFSITE**


DRAWING TITLE: **PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU**

DRAWING NO.	REV.	SIZE	SCALE	SHEET
EI027-HSE-VD-PR-PID-002	03	A3	NTC	2 of 12

TAG NO.	RU0001A-C-01
SERVICE	COMPRESSOR
TYPE	OIL FLOODED SCREW
MANUFACTURER	MAYEKAWA
DESIGN DP (BARG)	23
DESIGN DUTY (kW)	165

TAG NO.	RU0001A-D-01
SERVICE	OIL SEPARATOR
DESIGN PRESS. (BARG)	22
DESIGN TEMP. (°C)	-29/100
ID x L (mm)	590 x 2250



REFERENCE DRAWING	DWG NO.	REV.			
NOTES :					
1- OIL TOP UP & VACUUM CONNECTION.					
2- INSPECTION HOLE.					
3- STOP CHECK VALVE FOR PREVENT SPIN BACK.					
4- DELETED.					
5- SIGNAL ROUT TO DCS.					
6- IN CASE OF LOW LEVEL, THE OIL HEATER TO BE TRIPPED.					
7- MAINTAIN TEMPERATURE FOR ELECTRICAL INSULATIONS IS 30°C.					
LEGEND:					
VENDOR	CUSTOMER				
HOLDE:					
EQUIPMENT LIST:					
KEY PLAN :					
REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
03	FEB-2025	AS BUILT	A.K	F.SH	A.M
02	OCT-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
01	AUG-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
00	JUL-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
CLIENT					
 پتروشیمی توسعه پارک صنعتی گوهر افق					
CONSULTING ENGINEER					
PROJECT: STYRENE PARK OFFSITE					
DRAWING TITLE: PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU					
DRAWING NO.		REV.	SIZE	SCALE	SHEET
EI027-HSE-VD-PR-PID-002		03	A3	NTC	3 of 12

TAG NO.	RU0001A-E-01
SERVICE	OIL COOLER
DESIGN PRESS. (BARG)	S: 30, T:30
DESIGN TEMP. (°C)	S:5/100, T:-45/100
DESIGN DUTY (kW)	24.7
ID x L (mm)	139.7 x 2200
TYPE	AEH

TAG NO.	RU0001A-P-01
SERVICE	OIL PUMP
TYPE	SCREW PUMP
DESIGN PRESS. (BARG)	26
DESIGN TEMP. (°C)	5 / 100
RATED POWER (kW)	2.5

TAG NO.	RU0001A-F-01A/S
SERVICE	OIL FILTER
DESIGN PRESS. (BARG)	23
DESIGN TEMP. (°C)	5/100
ID x L (mm)	MAYEKAWA

14	15	16
REFERENCE DRAWING	DWG NO.	REV.

NOTES :

- ONE OPERATING / ONE STAND-BY.
- DP=3 BAR.
- SIGNAL ROUT TO DCS.
- HEAT TRACING TO BE TURNED OFF DURING COMPRESSOR START.
- MAINTAIN TEMPERATURE FOR ELECTRICAL INSULATIONS IS 30°C.

LEGEND:

VENDOR CUSTOMER


HOLDE:

EQUIPMENT LIST:

KEY PLAN :

REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
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CLIENT



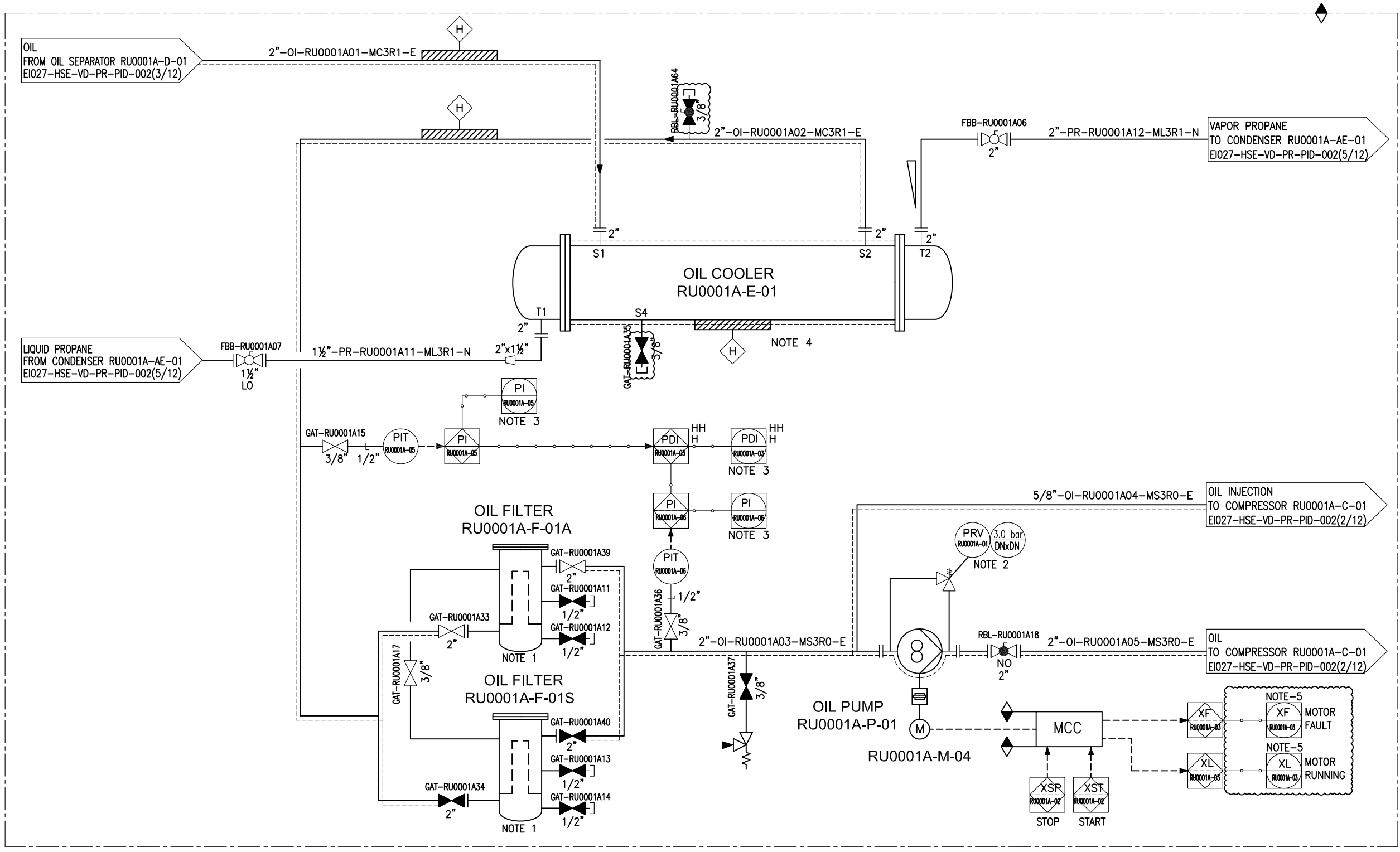
پتروشیمی توسعه پارک
صنعتی گوهر افق

CONSULTING ENGINEER

PROJECT: **STYRENE PARK OFFSITE**

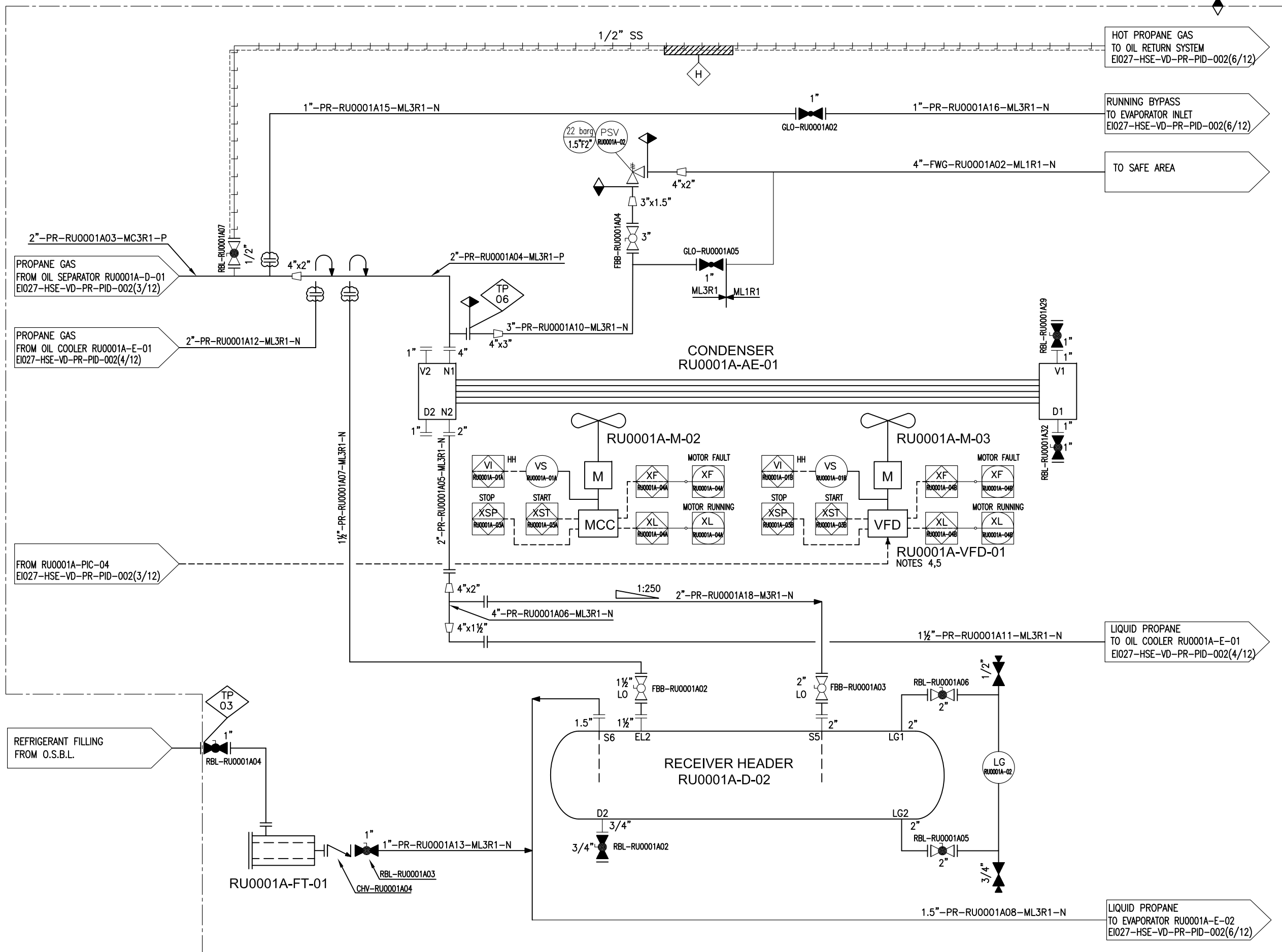
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DRAWING NO.	REV.	SIZE	SCALE	SHEET
EI027-HSE-VD-PR-PID-002	03	A3	NTC	4 of 12



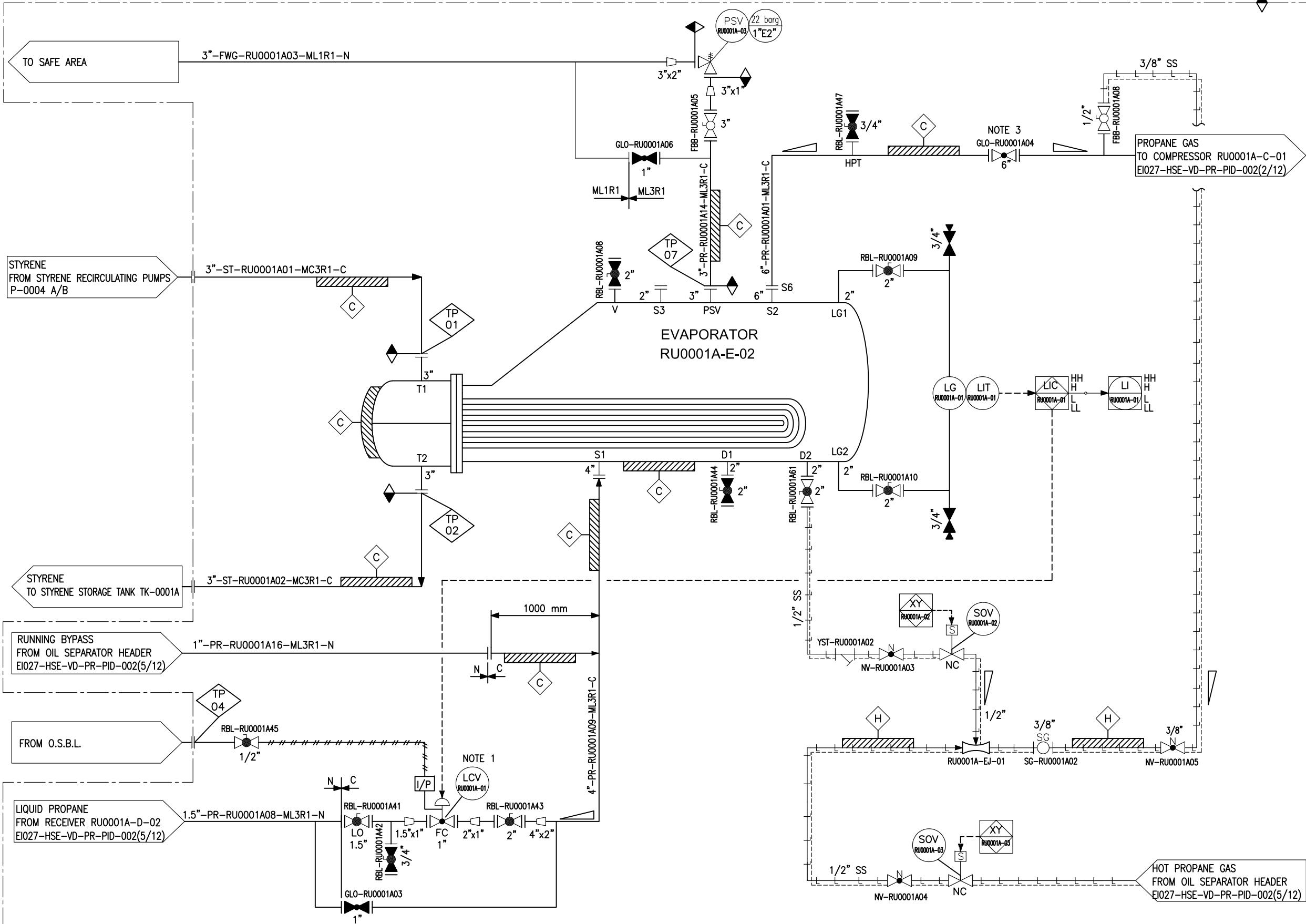
TAG NO.	RU0001A-AE-01
SERVICE	CONDENSER
DESIGN PRESS. (BARG)	22.0+FV
DESIGN TEMP. (°C)	-45/120
DESIGN DUTY (kW)	257


TAG NO.	RU0001A-D-02
SERVICE	RECEIVER HEADER
DESIGN PRESS. (BARG)	22.0+FV
DESIGN TEMP. (°C)	-45/120
ID x L (mm)	437 x 4000

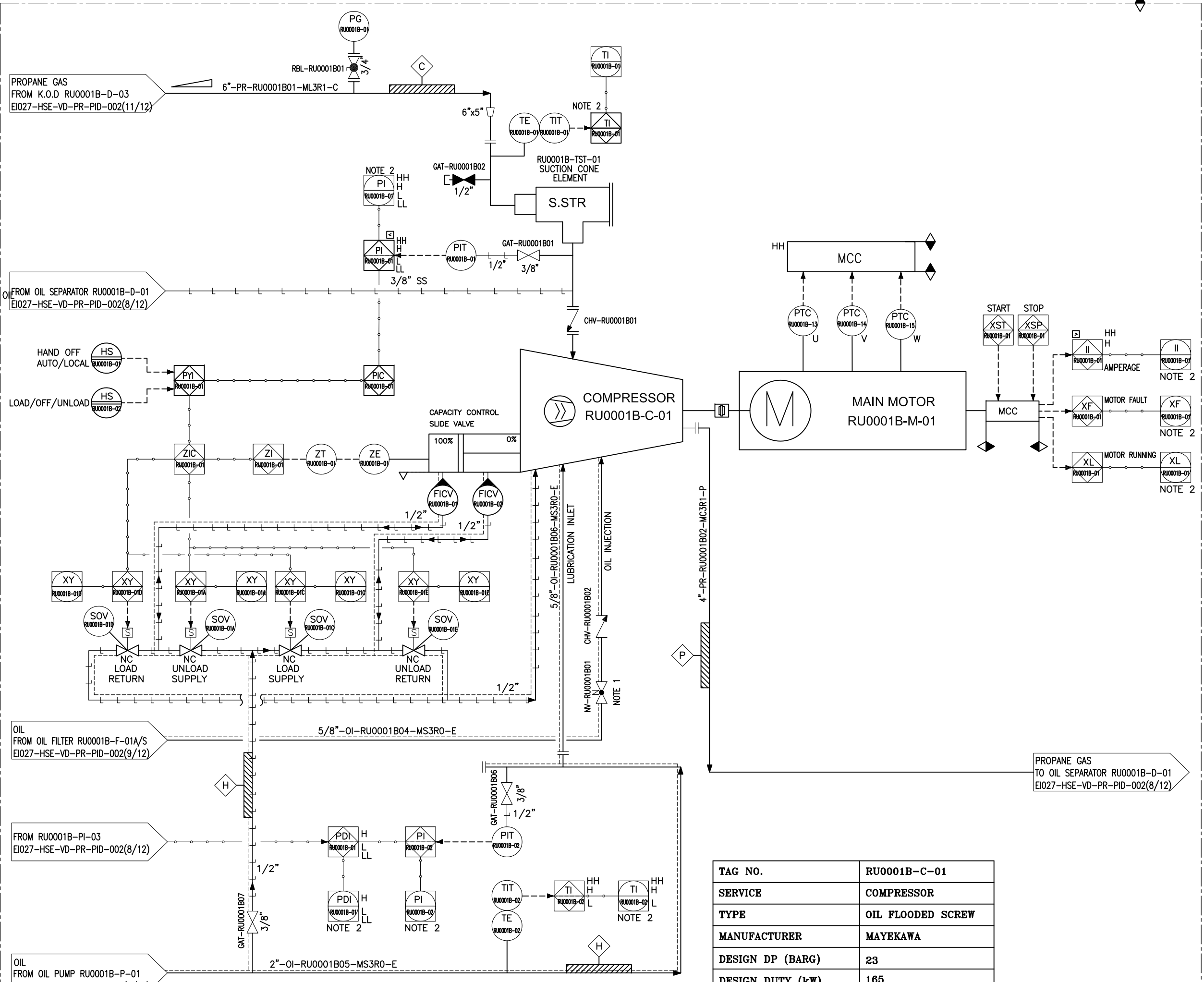



REFERENCE DRAWING	DWG NO.	REV.			
NOTES :					
1- DELETED.					
2- MANUAL FAN PITCH HAS BEEN CONSIDERED FOR EACH FAN.					
3- MAINTAIN TEMPERATURE FOR ELECTRICAL INSULATIONS IS 30°C.					
4- VARIABLE FREQUENCY DRIVE IS INSTALLED IN MOTOR CONTROL CENTER.					
5- MOTOR HARDWIRE CONNECTED TO VARIABLE FREQUENCY DRIVE.					
LEGEND:					
VENDOR	CUSTOMER				
HOLDE:					
EQUIPMENT LIST:					
KEY PLAN :					
REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
03	FEB-2025	AS BUILT	A.K	F.SH	A.M
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00	JUL-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
CLIENT					
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CONSULTING ENGINEER					
PROJECT: STYRENE PARK OFFSITE					
DRAWING TITLE: PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU					
DRAWING NO.	REV.	SIZE	SCALE	SHEET	
EIO27-HSE-VD-PR-PID-002	03	A3	NTC	5 of 12	

TAG NO.	RU0001A-E-02
SERVICE	EVAPORATOR
DESIGN PRESS. (barg)	S: 22.0+FV, T: 6.8+FV
DESIGN TEMP. (°C)	S: -45/120, T: 85
DESIGN DUTY (kW)	166.6
SHELL ID x TUBE L (mm)	600-925 x 2300
TEMA TYPE	BKU



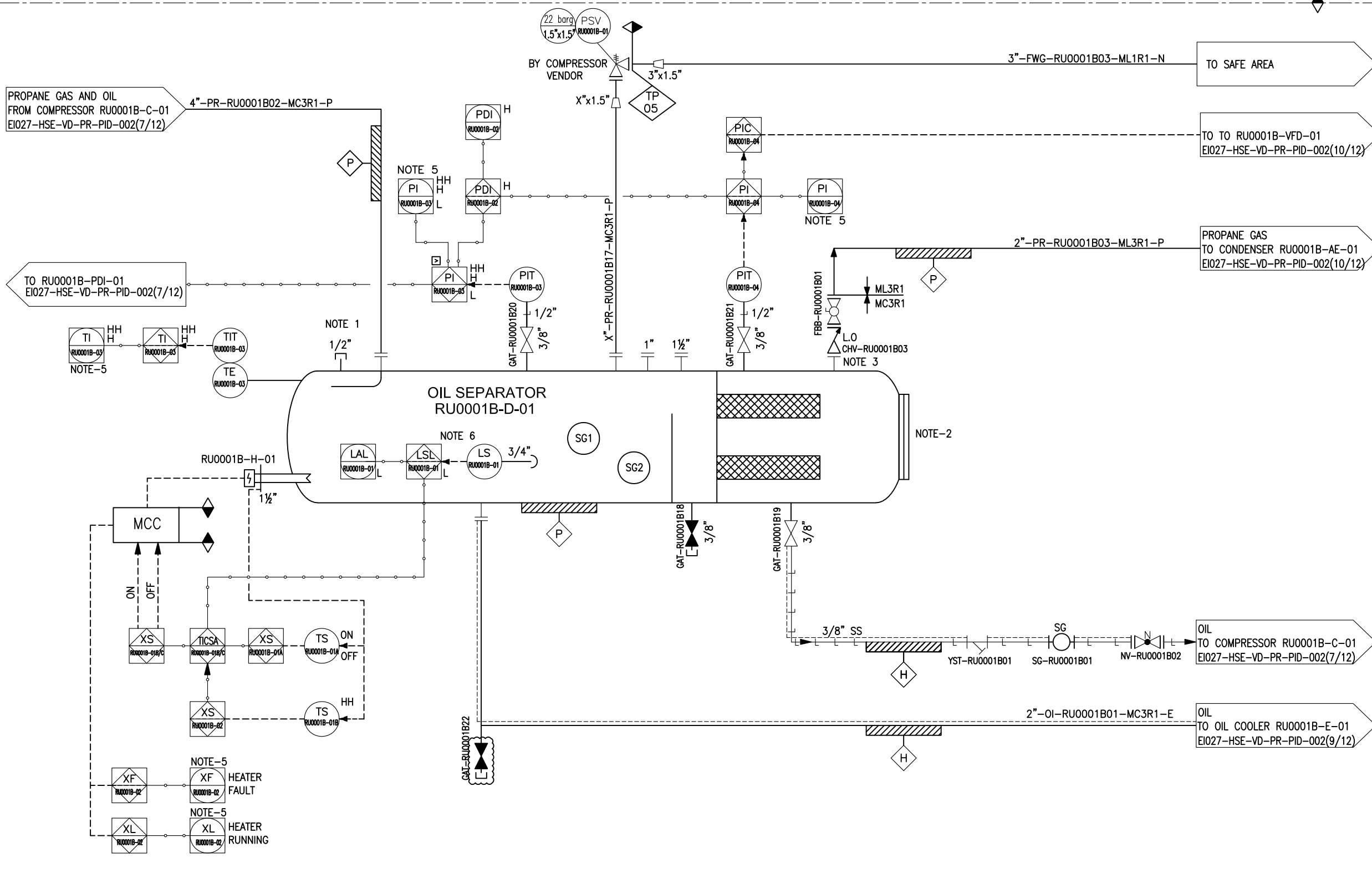
REFERENCE DRAWING	DWG NO.	REV.			
NOTES :					
1- TRAVEL DOWN BLOCK TO BE SET AND LOCKED AT MINIMUM OPENING DURING COMMISSIONING (2 ~ 5%).					
2- DELETED.					
3- AT STAND STILL CONDITION, VALVE NEEDS TO BE CLOSED COMPLETELY. DURING START-UP VALVE TO BE OPENED SMOOTHLY.					
4- MAINTAIN TEMPERATURE FOR ELECTRICAL INSULATIONS IS 30°C.					
LEGEND:					
VENDOR	CUSTOMER				
HOLDE:					
EQUIPMENT LIST:					
KEY PLAN :					
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REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
CLIENT					
 پتروشیمی توسعه پارک صنعتی گوهر افق					
CONSULTING ENGINEER					
PROJECT: STYRENE PARK OFFSITE					
DRAWING TITLE: PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU					
DRAWING NO.	REV.	SIZE	SCALE	SHEET	
EI027-HSE-VD-PR-PID-002	03	A3	NTC	6 of 12	



REFERENCE DRAWING	DWG NO.	REV.			
NOTES :					
1- OPENING DEGREE TO BE SET DURING COMMISSIONING AND LOGGED.					
2- SIGNALS ROUT TO DCS.					
3- MAINTAIN TEMPERATURE FOR ELECTRICAL INSULATIONS IS 30°C.					
LEGEND:					
VENDOR	CUSTOMER				
HOLDE:					
EQUIPMENT LIST:					
KEY PLAN :					
REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
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DRAWING TITLE: PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU					
DRAWING NO.	REV.	SIZE	SCALE	SHEET	
EI027-HSE-VD-PR-PID-002	03	A3	NTC	7 of 12	

TAG NO.	RU0001B-C-01
SERVICE	COMPRESSOR
TYPE	OIL FLOODED SCREW
MANUFACTURER	MAYEKAWA
DESIGN DP (BARG)	23
DESIGN DUTY (kW)	165

TAG NO.	RU0001B-D-01
SERVICE	OIL SEPARATOR
DESIGN PRESS. (BARG)	22
DESIGN TEMP. (°C)	-29/100
ID x L (mm)	590 x 2250



REFERENCE DRAWING	DWG NO.	REV.

- NOTES :
- 1- OIL TOP UP & VACUUM CONNECTION.
 - 2- INSPECTION HOLE.
 - 3- STOP CHECK VALVE FOR PREVENT SPIN BACK.
 - 4- DELETED.
 - 5- SIGNAL ROUT TO DCS.
 - 6- IN CASE OF LOW LEVEL, THE OIL HEATER TO BE TRIPPED.
 - 7- MAINTAIN TEMPERATURE FOR ELECTRICAL INSULATIONS IS 30°C.

LEGEND:

VENDOR	CUSTOMER
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HOLDE:

EQUIPMENT LIST:

KEY PLAN :

REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
03	FEB-2025	AS BUILT	A.K	F.SH	A.M
02	OCT-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
01	AUG-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
00	JUL-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M

CLIENT



پتروشیمی توسعه پارک
صنعتی گوهر افق

CONSULTING ENGINEER

PROJECT: **STYRENE PARK OFFSITE**

DRAWING TITLE: **PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU**

DRAWING NO.	REV.	SIZE	SCALE	SHEET
EI027-HSE-VD-PR-PID-002	03	A3	NTC	8 of 12

TAG NO.	RU0001B-E-01
SERVICE	OIL COOLER
DESIGN PRESS. (BARG)	S: 30, T:30
DESIGN TEMP. (°C)	S:5/100, T:-45/100
DESIGN DUTY (kW)	24.7
ID x L (mm)	139.7 x 2200
TYPE	AEH

TAG NO.	RU0001B-P-01
SERVICE	OIL PUMP
TYPE	SCREW PUMP
DESIGN PRESS. (BARG)	26
DESIGN TEMP. (°C)	5 / 100
RATED POWER (kW)	2.5



TAG NO.	RU0001B-F-01A/S
SERVICE	OIL FILTER
DESIGN PRESS. (BARG)	23
DESIGN TEMP. (°C)	5/100
ID x L (mm)	MAYEKAWA

14	15	16
REFERENCE DRAWING	DWG NO.	REV.

NOTES :

- ONE OPERATING / ONE STAND-BY.
- DP=3 BAR.
- SIGNAL ROUT TO DCS.
- HEAT TRACING TO BE TURNED OFF DURING COMPRESSOR START.
- MAINTAIN TEMPERATURE FOR ELECTRICAL INSULATIONS IS 30°C.

LEGEND:

VENDOR  CUSTOMER 

HOLDE:

EQUIPMENT LIST:

KEY PLAN :

03	FEB-2025	AS BUILT	A.K	F.SH	A.M
02	OCT-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
01	AUG-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
00	JUL-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M

REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
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CLIENT



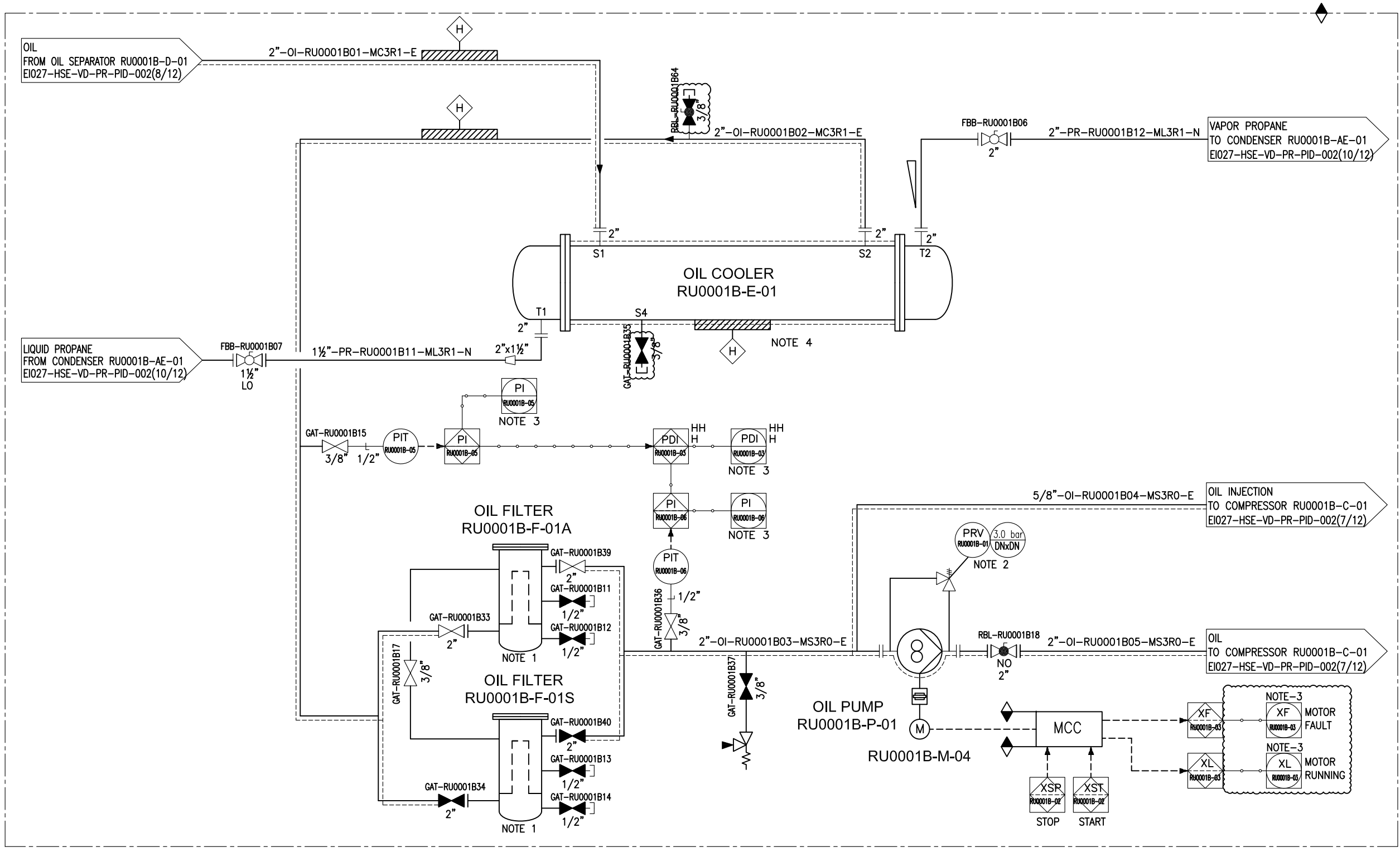
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CONSULTING ENGINEER

PROJECT: **STYRENE PARK OFFSITE**

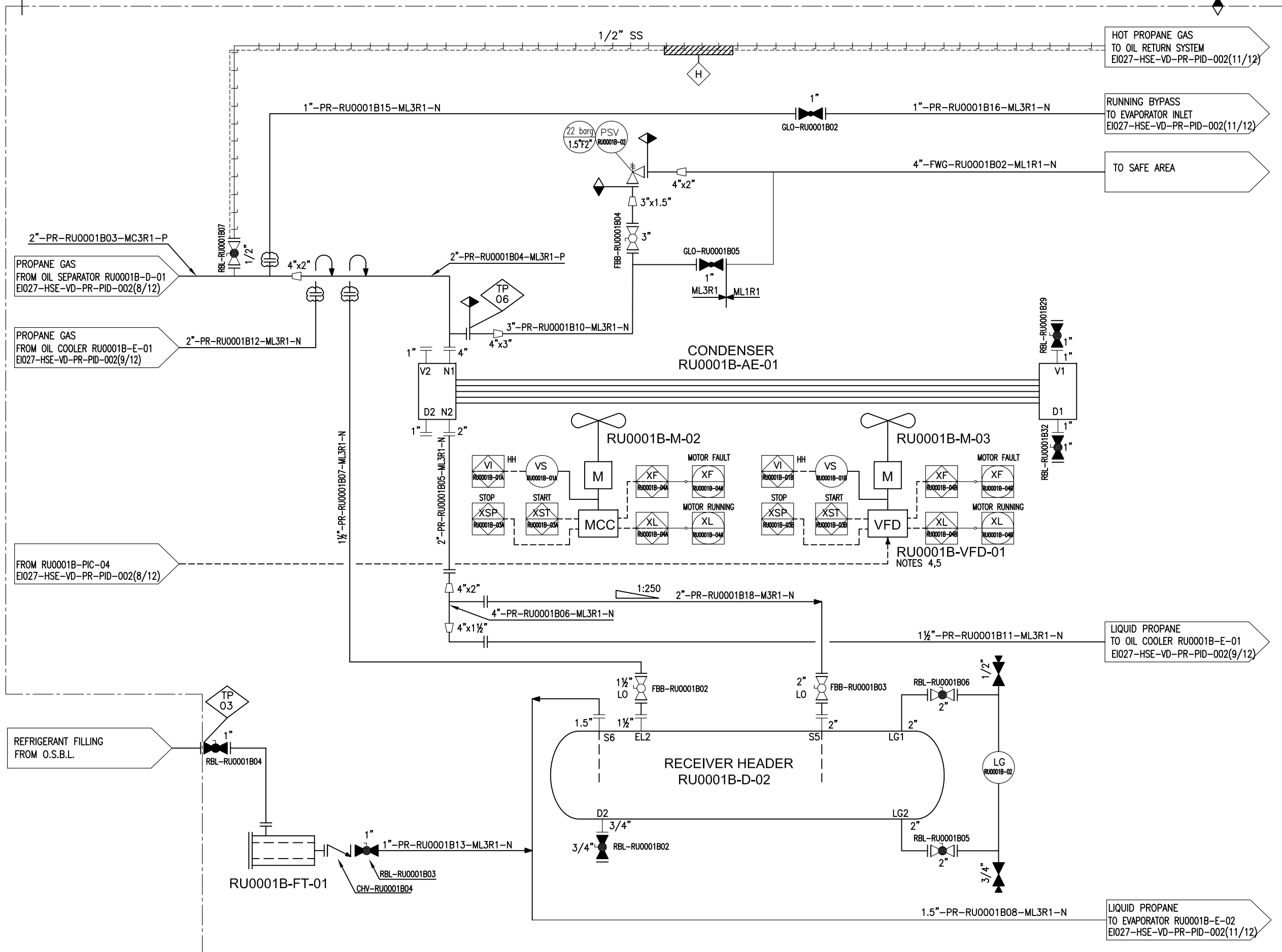
DRAWING TITLE: **PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU**


DRAWING NO.	REV.	SIZE	SCALE	SHEET
EI027-HSE-VD-PR-PID-002	03	A3	NTC	9 of 12



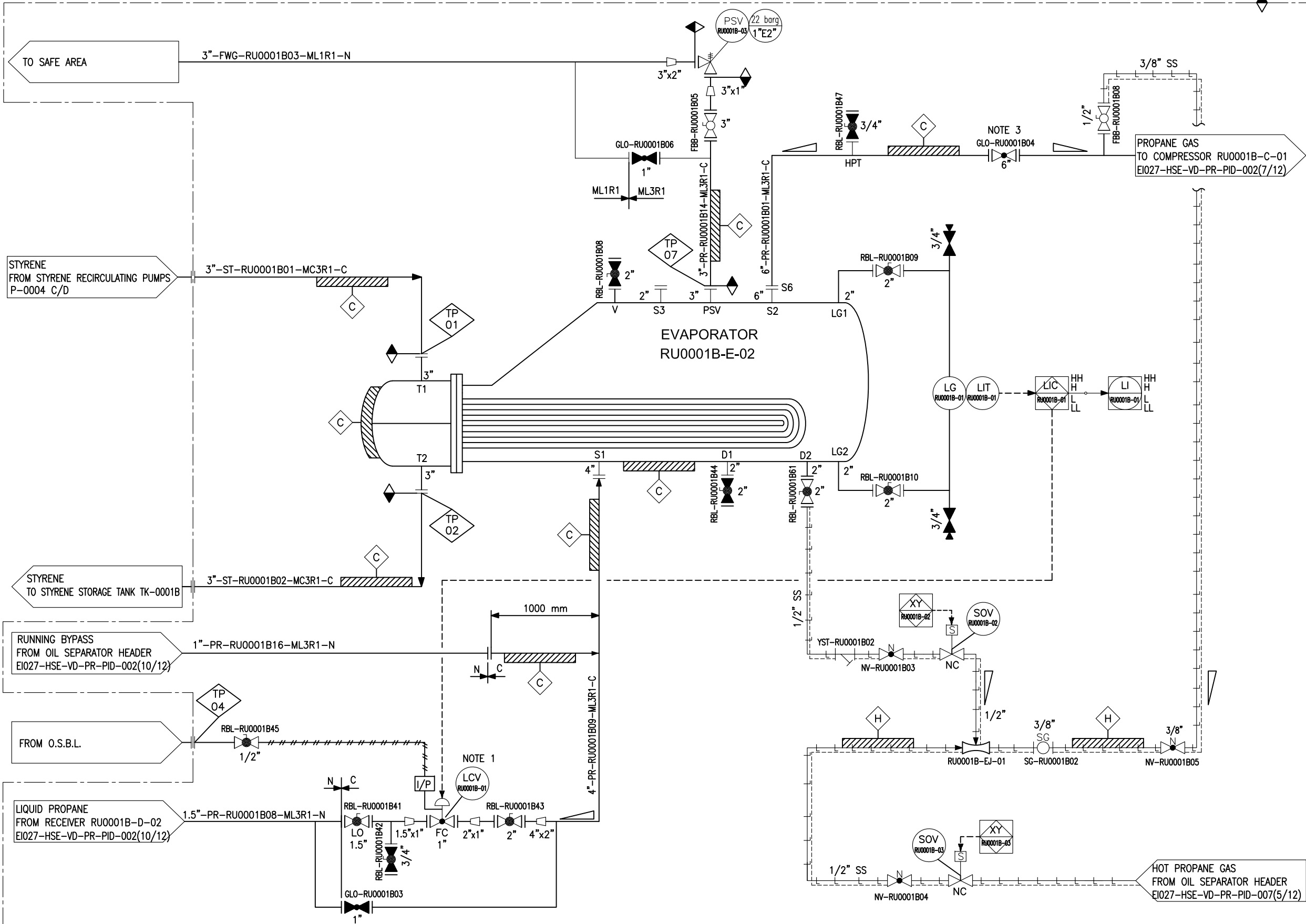
TAG NO.	RU0001B-AE-01
SERVICE	CONDENSER
DESIGN PRESS. (BARG)	22.0+FV
DESIGN TEMP. (°C)	-45/120
DESIGN DUTY (kW)	257

TAG NO.	RU0001B-D-02
SERVICE	RECEIVER HEADER
DESIGN PRESS. (BARG)	22.0+FV
DESIGN TEMP. (°C)	-45/120
ID x L (mm)	437 x 4000

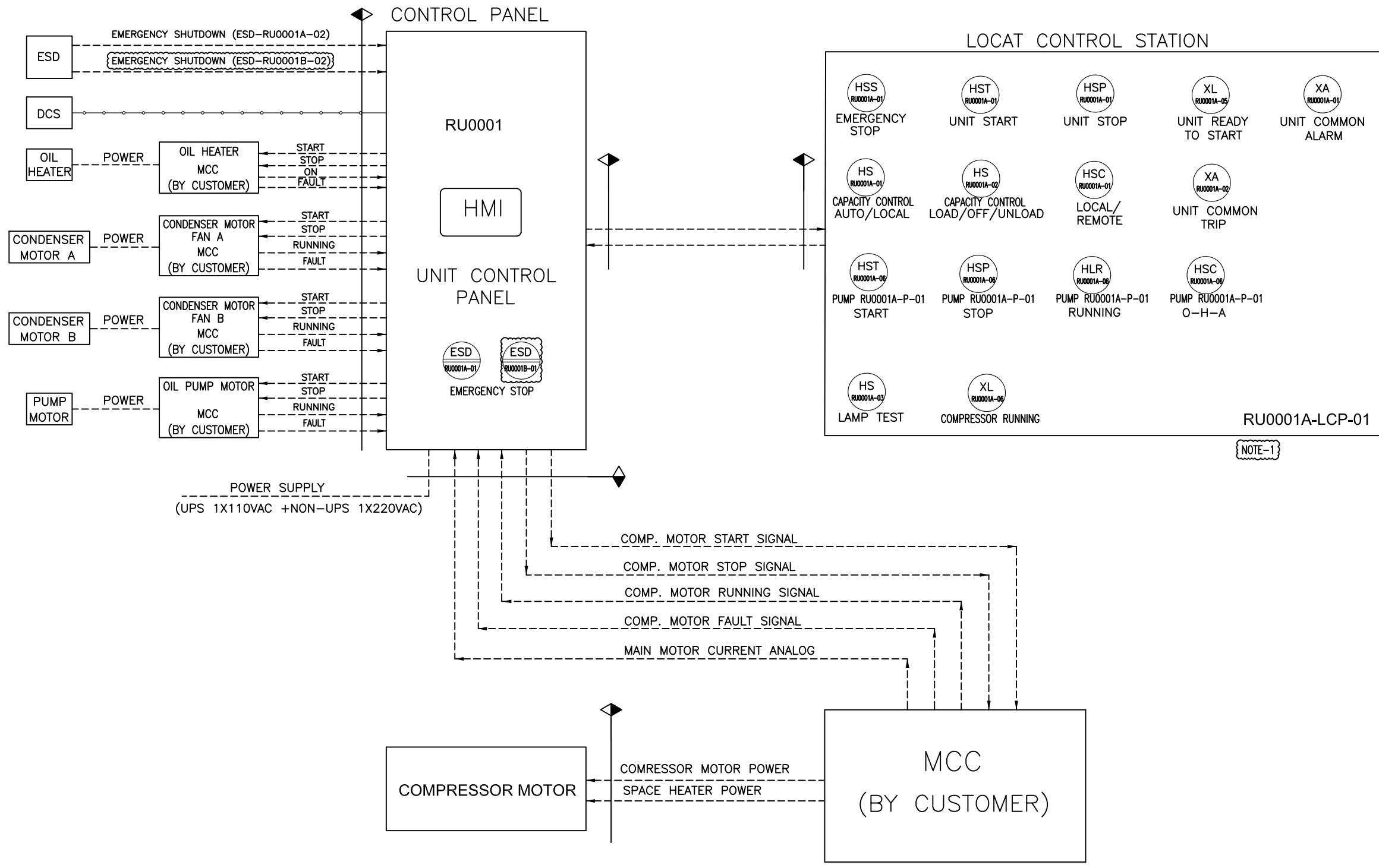


REFERENCE DRAWING	DWG NO.	REV.			
NOTES :					
1- DELETED.					
2- MANUAL FAN PITCH HAS BEEN CONSIDERED FOR EACH FAN.					
3- MAINTAIN TEMPERATURE FOR ELECTRICAL INSULATIONS IS 30°C.					
4- VARIABLE FREQUENCY DRIVE IS INSTALLED IN MOTOR CONTROL CENTER.					
5- MOTOR HARDWARE CONNECTED TO VARIABLE FREQUENCY DRIVE.					
LEGEND:					
VENDOR	CUSTOMER				
HOLDE:					
EQUIPMENT LIST:					
KEY PLAN :					
REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
03	FEB-2025	AS BUILT	A.K	F.SH	A.M
02	OCT-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
01	AUG-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
00	JUL-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
CLIENT					
 پتروشیمی توسعه پارک صنعتی گوهر افق					
CONSULTING ENGINEER					
PROJECT: STYRENE PARK OFFSITE					
DRAWING TITLE: PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU					
DRAWING NO.	REV.	SIZE	SCALE	SHEET	
EIO27-HSE-VD-PR-PID-002	03	A3	NTC	10 of 12	

TAG NO.	RU0001B-E-02
SERVICE	EVAPORATOR
DESIGN PRESS. (barg)	S: 22.0+FV, T: 6.8+FV
DESIGN TEMP. (°C)	S: -45/120, T: 85
DESIGN DUTY (kW)	166.6
SHELL ID x TUBE L (mm)	600-925 x 2300
TEMA TYPE	BKU



REFERENCE DRAWING	DWG NO.	REV.			
NOTES :					
1- TRAVEL DOWN BLOCK TO BE SET AND LOCKED AT MINIMUM OPENING DURING COMMISSIONING (2 ~ 5%).					
2- DELETED.					
3- AT STAND STILL CONDITION, VALVE NEEDS TO BE CLOSED COMPLETELY. DURING START-UP VALVE TO BE OPENED SMOOTHLY.					
4- MAINTAIN TEMPERATURE FOR ELECTRICAL INSULATIONS IS 30°C.					
LEGEND:					
HOLDE:					
EQUIPMENT LIST:					
KEY PLAN :					
REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
03	FEB-2025	AS BUILT	A.K	F.SH	A.M
02	OCT-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
01	AUG-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
00	JUL-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
CLIENT					
CONSULTING ENGINEER					
PROJECT: STYRENE PARK OFFSITE					
DRAWING TITLE: PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU					
DRAWING NO.	REV.	SIZE	SCALE	SHEET	
EI027-HSE-VD-PR-PID-002	03	A3	NTC	11 of 12	



14	15	16
REFERENCE DRAWING	DWG NO.	REV.

NOTES :

1- FOR RU-0001B-LCP-01, ALL TAG NUMBERS RU0001A IN LCP ARE CHANGED TO RU0001B

LEGEND:

VENDOR CUSTOMER


HOLDE:

EQUIPMENT LIST:

KEY PLAN :

REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
03	FEB-2025	AS BUILT	A.K	F.SH	A.M
02	OCT-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
01	AUG-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M
00	JUL-2024	ISSUED FOR APPROVAL (IFA)	A.K	F.SH	A.M

CLIENT



CONSULTING ENGINEER

PROJECT: **STYRENE PARK OFFSITE**

DRAWING TITLE: **PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU**

NO.	LOCATION	DESCRIPTION	SIZE
TP-01	PACKAGE	CHILLER INLET	3"-300 ANSI RF
TP-02	PACKAGE	CHILLER OUTLET	3"-300 ANSI RF
TP-03	PACKAGE	FILTER DRYER PROPYLENE INLET	1"-300 ANSI RF
TP-04	PACKAGE	INSTRUMENT AIR SUPPLY	1/2"-150 ANSI RF
TP-05	PACKAGE	OIL SEPARATOR PRESSURE SAFETY	1.5"-300 ANSI RF
TP-06	PACKAGE	CONDENSER PRESSURE SAFETY	3"-300 ANSI RF
TP-07	PACKAGE	EVAPORATOR PRESSURE SAFETY	3"-300 ANSI RF

DRAWING NO.	REV.	SIZE	SCALE	SHEET
EI027-HSB-YD-PR-PID-002	03	A3	NTC	12 of 12