



Toase-e Park Sanati Gohar Ofogh  
Petrochemical Co.  
**CONCEPTUAL, BASIC and DETAIL DESIGN  
ENGINEERING OF STYRENE PARK OFFSITE**



Document Title: Utility Consumption List including Electrical Load List

Document No.: EI027-HSE-VD – PR– LST– 003-R1

Rev. R1

Page 1 of 6

## STYRENE PARK OFFSITE

### Document Title: Utility Consumption List including Electrical Load List

Rev.	Issued Date	DESCRIPTION	PREPARED	CHECKED	APPROVED
R1	20-07-2025	FI	F.SH	M.O	A.M
R0	26-08-2024	IFA	F.SH	M.O	A.M



**Toase-e Park Sanati Gohar Ofogh  
Petrochemical Co.  
CONCEPTUAL, BASIC and DETAIL DESIGN  
ENGINEERING OF STYRENE PARK OFFSITE**



Document Title: Utility Consumption List including Electrical Load List





Document No.: EI027-HSE-VD – PR– LST– 003-R1

Rev. R1

Page 2 of 6

**REVISION RECORD SHEET**





Page Page	Revisions							Page	Revisions						
	R0	R1	R2	R3	R4	R5	R6		R0	R1	R2	R3	R4	R5	R6
1	X	X						41							
2	X	X						42							
3	X	X						43							
4	X	X						44							
5	X	X						45							
6	X	X						46							
7								47							
8								48							
9								49							
10								50							
11								51							
12								52							
13								53							
14								54							
15								55							
16								56							
17								57							
18								58							
19								59							
20								60							
21								61							
22								62							
23								63							
24								64							
25								65							
26								66							
27								67							
28								68							
29								69							
30								70							
31								71							
32								72							
33								73							
34								74							
35								75							
36								76							
37								77							
38								78							
39								79							

 	<b>Toase-eh Park Sanati Gohar Ofogh Petrochemical Co.</b>				 	
	<b>CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE</b>					
	Document Title: Utility Consumption List including Electrical Load List					
Document No.: EI027-HSE-VD – PR– LST– 003-R1					Rev. R1	Page 3 of 6

INSTRUMENT AIR													
ITEM	SERVICE	FLUID (PHASE)	PIPING SIZE	FLOW (Nm3/h) Cont. / Design	TEMPERATURE (°C)				PRESSURE (barg)				DURATION
					MIN.	NORM.	MAX.	DESIGN	MIN.	NORM.	MAX.	DESIGN	
REFRIGERATION PACKAGE RU0001 A/B	VALVES	INSTRUMENT AIR (GAS)	1/2"	1.8 / -	5	AMB.	50	85	6.5	7	7.5	10.5	CONTINUOUS
NOTES: 1) Air Consumption for Control Valves= 0.9 Nm3/h Per Valve.													

GENARL NOTES:

- Utility consumption data are considered for whole package.

 	<b>Toase-eh Park Sanati Gohar Ofogh Petrochemical Co.</b>		 
	<b>CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE</b>		
	Document Title: Utility Consumption List including Electrical Load List		
Document No.: EI027-HSE-VD – PR– LST– 003-R1			Rev. R1   Page 4 of 6

## DEFINITIONS:

### COLUMN POWER SUPPLY :

"STATUS SUPPLY" INDICATES TYPE OF POWER SUPPLY

- N : NORMAL
- E : EMERGENCY
- U : UPS LOADS

### COLUMN RATED POWER (KW)

RATED POWER SHALL BE CONSIDERED MECHANICAL POWER WITH API  
FACTOR CONSIDERATION AND  
NORMALIZATION TO STANDARD RATING POWERS (REFER TO IEC60072-1)

### COLUMN EFFICIENCY (%) :

EFFICIENCY FACTOR AT NORMAL LOAD

### COLUMN POWER FACTOR (%) :

POWER FACTOR AT NORMAL LOAD



**Toase-eh Park Sanati Gohar Ofogh  
Petrochemical Co.  
CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK  
OFFSITE**



Document Title: Utility Consumption List including Electrical Load List

Document No.: EI027-HSE-VD – PR– LST– 003-R1

Rev. R1

Page 5 of 6

REV.	ITEM	TAG NO.	Description	Quantity Total	Quantity			Rated Power (KW)	Normal Power (KW)	Rated Voltage	Efficiency (%)	Power Factor	3 phase / 1 phase	Power Supply	REMARKS
					Continuous	Intermittent	Standby							N/E/U	
0	1	70-UCP-RU7001A/B	Unit Control Panel	1	x	-	-	2.500	2.500	110 VAC	100	0.97	1 phase	U	
0	2	70-UCP-RU7001A/B	Unit Control Panel	1	x	-	-	1.000	1.000	220 VAC	100	0.97	1 phase	N	
0	3	RU0001A-M-01	Main Motor	1	x	-	-	120	120	400 VAC	95.4	0.91	3 phase	N	
0	4	RU0001B-M-01	Main Motor	1	x	-	-	120	120	400 VAC	95.4	0.91	3 phase	N	
0	5	RU0001A-MSH-01	Main Motor Space Heater	1	-	x	-	0.109	0.109	230AC	100	1.00	1 phase	N	
0	6	RU0001B-MSH-01	Main Motor Space Heater	1	-	x	-	0.109	0.109	230AC	100	1.00	1 phase	N	
0	7	RU0001A-M-04	AUX Motor	1	x	-	-	2.5	2.5	400VAC	87.7	0.8	3 phase	N	
0	8	B-M-04	AUX Motor	1	x	-	-	2.5	2.5	400VAC	87.7	0.8	3 phase	N	
0	9	RU0001A-H-01	Oil Heater	1	x	-	-	2	2	400VAC	100	1	3 phase	N	
0	10	RU0001B-H-01	Oil Heater	1	x	-	-	2	2	400VAC	100	1	3 phase	N	



**Toase-eh Park Sanati Gohar Ofogh  
Petrochemical Co.  
CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK  
OFFSITE**



Document Title: Utility Consumption List including Electrical Load List

Document No.: EI027-HSE-VD – PR– LST– 003-R1

Rev. R1

Page 6 of 6

ITEM	REV.	TAG NO.	Description	Load Type	Load Statude	Operating Type	Voltage Type	Voltage (V)	Frequency (Hz)	Mechanical Absorbed Power (KW)	Rotor Shaft Power @/Min Temp	API 661 Factor (part: 7.2.7.1.2)	Absorbed Power (KW) (see note 1)	EFF.	P.F.	Operating Power(Kw)	Rated Power	rated Current	Density Factor	Starting Method
1	0	RU0001A-M-03	Air cooler MOTOR LOAD LV-400V	M	C	N	3 PH	400±5%	50±2%	4.5	5.3	1.05	4.97	0.9	0.84	6.9	7.5	14.43	1	VFD
2	0	RU0001A-M-02	Air cooler MOTOR LOAD LV-400V	M	C	N	3 PH	400±5%	50±2%	4.5	5.3	1.05	4.97	0.9	0.84	6.9	7.5	14.43	1	DOL
3	0	RU0001B-M-03	Air cooler MOTOR LOAD LV-400V	M	C	N	3 PH	400±5%	50±2%	4.5	5.3	1.05	4.97	0.9	0.84	6.9	7.5	14.43	1	VFD
4	0	RU0001B-M-02	Air cooler MOTOR LOAD LV-400V	M	C	N	3 PH	400±5%	50±2%	4.5	5.3	1.05	4.97	0.9	0.84	6.9	7.5	14.43	1	DOL
C: Countinus Operation																				
CS: Countinus Standby																				
IO: Intermitant Operation																				
SD: Shutdown operation																				
SU: Start Up operation																				
N: Normal Load																				
E:Emergency Load																				
DOL: Direct on Line Staring																				
VFD: Variable Frequency Drive																				