



# شرکت پتروالکترونیک



## فرم صورتجلسه

شماره صورتجلسه:	محل جلسه: اتاق جلسه ی شرکت پتروالکترونیک	تاریخ و زمان جلسه: 1402-10-19
تهیه کننده: فریدون یاری	موضوع جلسه: بررسی کامنت های مربوط به شرکت DELTA-GMBH - پکیج RU	

امضا	سمت	نام و نام خانوادگی	شرکت
	هماهنگ کننده مهندسی	حسن آهنگران	شرکت پادجم
	مدیر امور مهندسی	مهندس جاوید	شرکت گوهرافق
	بازرگانی خارجی	فریدون یاری	پتروالکترونیک
	مدیر امور مهندسی	موبد نمازی	پتروالکترونیک
	مدیرعامل	مالکی نیا	DELTA-GMBH
	مدیر مهندسی	استا	DELTA-GMBH
	مدیر پروژه	شعاریان	DELTA-GMBH

M. Osta



# شرکت پتروالکترونیک

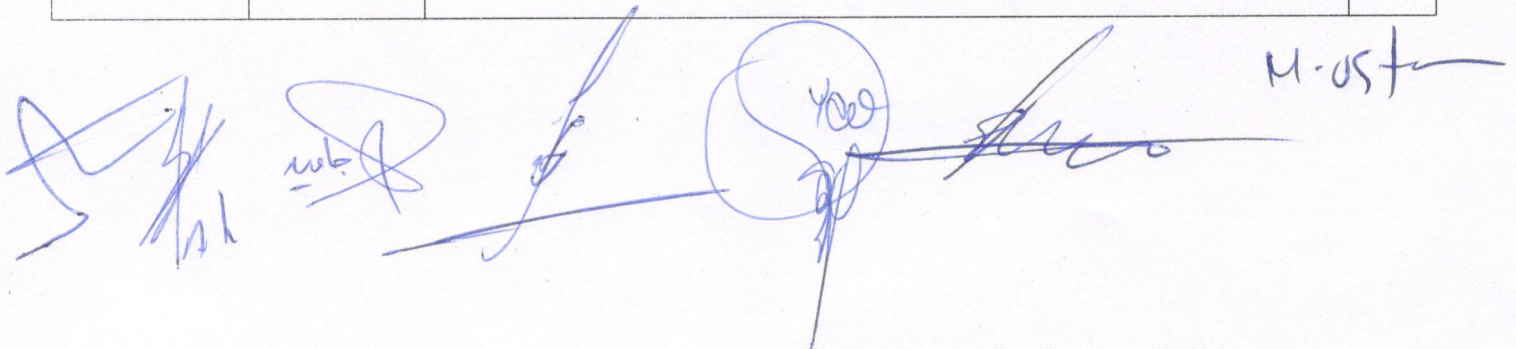


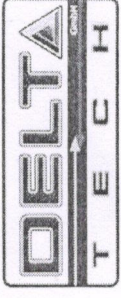
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ردیف	شرح	مسئول پیگیری	تاریخ اقدام
۱	کامنت های مهندسی مربوط به Data Sheet مورد بررسی قرار گرفت و بر اساس کامنت های پیوست سازنده محترم امکان ساخت دو دستگاه RU Package را دارد.		
۲	مدرک VPIS شرکت DELTA - GMBH در خصوص RU Package مورد بررسی قرار گرفت و مورد تایید می باشد.		
۳	مقرر گردید تمامی مکاتبات مربوط به بررسی مدارک مهندسی ساخت و سایر را به ایمیل های مربوطه نیز اضافه گردد. F.DEZFOULI@PJPC.IR , H.AHANGARAN@PJPC.IR , S.FIROOZABADI@PETROELECTRIC.IR		





Document Title: Vendor Document & Index Schedule (VDIS)

Document No.: E1027-HSE-VD-GE-LST-002- R0

**VPIS DCI**

No.	Discipline	Doc. No.	Title	M.H	W.F.	Issue Plan	1st ISSUE			2nd ISSUE			3th ISSUE		
							VPIS Issued Info			VPIS Issued Info			VPIS Issued Info		
							Tr. No.	Date	Rev.	Status	Reply	Ref. No.	Date	Tr. No.	Date
<b>General</b>															
1		E1027-HSE-VD - GE- SCH- 001- XX	Project Schedule												
2		E1027-HSE-VD - GE- LST- 002- XX	Vendor Document & Index Schedule (VDIS)												
3		E1027-HSE-VD - GE- LST- 003- XX	Final data book Index												
4		E1027-HSE-VD - GE- FDB- 004- XX	Final data book												
5		E1027-HSE-VD - GE- PRO- 005- XX	Packing, Marking & Shipping Procedure												
6		E1027-HSE-VD - GE- LST- 006- XX	Sub-Vendor List												
7		E1027-HSE-VD - GE- LST- 007- XX	Spare Part List for Commissioning & Start-up and Two Years Operation												
8		E1027-HSE-VD - GE- LST- 008- XX	Special Tools List												
<b>Process</b>															
9		E1027-HSE-VD - PR- PFD- 001- XX	Process Flow Diagram (PFD)												
10		E1027-HSE-VD - PR- PID- 002- XX	Piping And Instrumentation Diagram (P&ID)												
11		E1027-HSE-VD - PR- LST- 003- XX	Utility Consumption List including Electrical Load List												
12		E1027-HSE-VD - PR- LST- 004- XX	Lubricant List/Grease List												
<b>Civil</b>															
13		E1027-HSE-VD - CI- DWG- 001- XX	Skid Foundation Plan												
<b>Mechanical</b>															
14		E1027-HSE-VD - ME- DSH- 001- XX	Package / Compressor Data Sheet												
15		E1027-HSE-VD - ME- DWG- 002- XX	Compressor Package Outline Drawing												
16		E1027-HSE-VD - ME- DWG- 003- XX	Oil Heater Data Sheet and Drawing												
17		E1027-HSE-VD - ME- DSH- 004- XX	Condenser Data Sheet												
18		E1027-HSE-VD - ME- DWG- 005- XX	Condenser Outline Drawing												
19		E1027-HSE-VD - ME- CAL- 006- XX	Mechanical calculation for Condenser												
20		E1027-HSE-VD - ME- DSH- 007- XX	Chiller (Evaporator) Data Sheet												
21		E1027-HSE-VD - ME- DWG- 008- XX	Chiller (Evaporator) Outline Drawing												
22		E1027-HSE-VD - ME- CAL- 009- XX	Chiller (Evaporator) Mechanical calculation												
23		E1027-HSE-VD - ME- DSH- 010- XX	Filter Dyer Data Sheet												

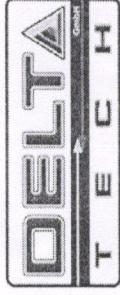
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Toase-ehe Park Sanati Gohar Petrochemical Co.

CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE



Document Title: Vendor Document & Index Schedule (VDIS)

Document No.: E1027-HSE-VD-GE-LST-002- R0

Rev.: R0

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**VPIS DCI**

No.	Discipline	Doc. No.	Title	M.H	W.F.	Issue Plan	1st ISSUE			2nd ISSUE			3th ISSUE		
							VPIS Issued Info			VPIS Issued Info			VPIS Issued Info		
							Tr. No.	Date	Rev.	Status	Reply	Ref. No.	Date	Tr. No.	Date
<b>Pipping</b>															
24		E1027-HSE-VD - PI- DWG- 001- XX	General Arrangement Drawing												
25		E1027-HSE-VD - PI- MOD- 002- XX	3D Model												
<b>Quality Control</b>															
26		E1027-HSE-VD - OC- ITP- 001- XX	Inspection And Test (ITP)												
27		E1027-HSE-VD - OC- PRO- 002- XX	Painting Procedure												
28		E1027-HSE-VD - OC- PRO- 003- XX	Compressor Test Procedure												
29		E1027-HSE-VD - OC- PRO- 004- XX	Test Procedure For Air Condenser and Chiller												
30		E1027-HSE-VD - OC- PRO- 005- XX	Weld book WPS/PQR/Weld Map For Air Condenser and Chiller												
<b>Instrumentation and control system</b>															
31		E1027-HSE-VD - IN- DIG- 001- XX	Cause & Effect Diagram												
32		E1027-HSE-VD - IN- DSH- 002- XX	Control Valve Data Sheet												
33		E1027-HSE-VD - IN- DSH- 003- XX	Instrument Data Sheet												
34		E1027-HSE-VD - IN- DIG- 004- XX	Local Panel and Junction Box Wiring Diagrams												
35		E1027-HSE-VD - IN- LST- 005- XX	I/O-list												
36		E1027-HSE-VD - IN- DSH-006- XX	ON/OFF-Solenoid Valve Data Sheet												
37		E1027-HSE-VD - IN- DSH-007- XX	Safety / Relief Valve Data Sheet												
38		E1027-HSE-VD - IN- DIG-008- XX	PLC Layout Drawing												
<b>Electrical</b>															
39		E1027-HSE-VD - EL- DSH-001- XX	Compressor Motor Data Sheet & Drawing												
40		E1027-HSE-VD - EL- DSH- 002- XX	Oil pump Motor Datasheet & Drawing												

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*Handwritten signature in blue ink, 'M. Osta' with a large flourish.*



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



BINA EPC Contractor Co.  
(Executor of Oil, Gas, Petrochemical & Power Industries)

Document Title: Package / Compressor Data Sheet

Document No.: EI027-HSE-VD –ME–DSH–001- R0

Rev. R0

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## STYRENE PARK OFFSITE

**Document Title:**

**Package / Compressor Data Sheet**

*M-031*  
*S.R. Javid*

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Rev.	Issued Date	DESCRIPTION	PREPARED	CHECKED	APPROVED
R0	09-09-2023	IFA	N.B	F.SH	A.M

**REVISION RECORD SHEET**



پاروکیماکامین نوسنمه پارک  
سیناکی گوهار افوق



BINA EPC Contractor Co.

(Executor of Oil, Gas, Petrochemical & Power Industries)

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



Document Title: Package / Compressor Data Sheet

Document No.: EI027-HSE-VD -ME-DSH-001- R0

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Page	Revisions							Page	Revisions						
	R0	R1	R2	R3	R4	R5	R6		R0	R1	R2	R3	R4	R5	R6
1	X							41							
2	X							42							
3	X							43							
4	X							44							
5	X							45							
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7	X							47							
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S.A. - Javid



**3** BINA EPC Contractor Co.  
 (Incorporated in UAE, for Petrochemical & Power Industries)

package data sheet



Document Title: Package / Compressor Data Sheet  
 Document No.: EI027-HSE-VD-ME-DSH-001- R0  
 Rev.R0  
 Date:09.09.2023  
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Customer: PETRO ELECTRIC  
 Plant Name/Project Name: RU-0001 A/B

Item No.: Styrene  
 CHILLER UNIT  
 No. of Required: 1 Unit(s)

CONDITION ( PROCESS) - BASED ON CUSTOMER DS / PER EACH COMP. UNIT			
Design	IN	OUT	Main & side flow Composition
Fluid (degC): Styrene	15.2		
Capacity (kW): 165			
Evaporating Temp. (degC): 1			
Condensing Temp. (degC): 55			
Side Temp. (degC):			

COMPRESSOR DESIGN CONDITION ( BASED ON MAYEKAWA CALCULATIONS) / PER EACH COMP. UNIT

Design	Design	Note
Compressor Model		
Motor Speed (rpm): 2950		※Motor Speed = Compressor Speed
Comp Load ( ): 100		
Quantity: 1	Per unit	
Capacity/unit (kW): 165		
Power/unit (kW):		According to represented Duty Spec. : "Outdoor without shelter and in hazardous area classified as IEC class 1 Zone 2" shall be considered.
Driver:		Vendor Reply:
Stating Method:		Electrical items are suitable for zone 2 MOM 1402-10-19
Capacity Control:		
Control Source: ***		
Range of Control: 30-100		
Control Method: Slide Valve		

SITE CONDITION  
 Location:  Indoor (heated)  Outdoor under Shelter (Provided by Client)  Hazardous Area : Zone 2 IIB T3  
 Normal weather condition (Temp. +5°C TO +48°C)

Noise:  Noise Level 85dB(A) at 1m from Unit  
 Oil Separation: 1st Separat 52 °C

Code & Standard: DELETED  
 Unit System: LAYOUT for SUNSHADE  
 TERIAL DESIGN: Design: MYK

Compressor	<input checked="" type="checkbox"/> JIS	<input checked="" type="checkbox"/> MYK Standard
Press Vessel	<input checked="" type="checkbox"/> AD/MYCOM STD	<input type="checkbox"/> ISO <input type="checkbox"/> PED <input checked="" type="checkbox"/> MYK Standard
Heat Exchanger	<input checked="" type="checkbox"/> AD/MYCOM STD	<input type="checkbox"/> ISO <input type="checkbox"/> PED <input checked="" type="checkbox"/> MYK Standard
Valve	<input checked="" type="checkbox"/> DIN <input checked="" type="checkbox"/> ASME	<input type="checkbox"/> ISO <input type="checkbox"/> PED <input checked="" type="checkbox"/> Manufacture's Std. <input type="checkbox"/> ISO
Safety Valve	<input type="checkbox"/> DIN <input type="checkbox"/> ASME	<input checked="" type="checkbox"/> Manufacture's Std. <input type="checkbox"/> ASRAE
Piping	<input checked="" type="checkbox"/> DIN <input checked="" type="checkbox"/> ASME	<input type="checkbox"/> ISO <input checked="" type="checkbox"/> Manufacture's Std.
Flange	<input checked="" type="checkbox"/> DIN <input checked="" type="checkbox"/> ASME	<input type="checkbox"/> ISO <input checked="" type="checkbox"/> Manufacture's Std. <input type="checkbox"/> JIS
Thread Connection	<input type="checkbox"/> DIN <input type="checkbox"/> ASME <input type="checkbox"/> ISO	<input type="checkbox"/> PT <input type="checkbox"/> NPT
MOTOR	<input type="checkbox"/> DIN <input type="checkbox"/> ASME <input type="checkbox"/> ISO	<input type="checkbox"/> JIS <input checked="" type="checkbox"/> IEC <input checked="" type="checkbox"/> Manufacture's Std. <input type="checkbox"/> ISO
Instrumentation	<input type="checkbox"/> DIN <input type="checkbox"/> ASME <input type="checkbox"/> ISO	<input type="checkbox"/> JIS <input checked="" type="checkbox"/> IEC <input checked="" type="checkbox"/> Manufacture's Std. <input type="checkbox"/> ISO
Control Panel	<input type="checkbox"/> DIN <input type="checkbox"/> ASME <input type="checkbox"/> ISO	<input type="checkbox"/> JIS <input type="checkbox"/> IEC <input type="checkbox"/> Manufacture's Std. <input type="checkbox"/> ISO
Cable & wiring	<input type="checkbox"/> DIN <input type="checkbox"/> ASME <input type="checkbox"/> ISO	<input type="checkbox"/> JIS <input checked="" type="checkbox"/> IEC <input checked="" type="checkbox"/> Manufacture's Std. <input type="checkbox"/> ISO

UTILITY

Electricity	Rated Power (kW)		Volte (V)	Frequency (Hz)	Phase	Note
	Value	Q'ty				
Compressor Power	85	1	LV	50	3	Compressor shaft power Rpm, 2950
Oil Pump Motor for CP	1.5	1	LV	50	3	CP = Compressor Pump
SB Oil Pump Motor for CP	n/a				3	SB = Stand-by
Control Panel			DC24V		1	
Oil Heater	1.5kW				3	

Cooling Water	Temp. (degC): in NA	return NA
	Press. (barG): in	
	Flow Rate (m3/hr): x 1	Fouling Factor TBA
Instrument	Press. (barG): ***	Temp. (degC): ***
		Flow Rate (Nm3/hr):
		Approx. ***

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BINA EPC Contractor Co.  
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package data sheet



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Scope of Supply and Work (1/3) – for Each compressor unit (Totally 2 Compressor Unit, One Common Condenser and Evaporator)

No	Item	Scope	Q'ty	Remarks
1	MYCOM Compressor		2	Compressor Skid 2 Working
	MY Compressor	■	1	model P125-M
	Compressor			Casing / Rotor : Cast iron / Ductile Iron, O-rings Viton
	Electric motor for compressor	■	1	Rated power 85k , LV, 50 Hz IP55 Exec Suitable for Zone 2
	Oil Pump	■	1	For Each Compressor
	Electric motor for Oil Pump	■	1	1.5 kW IP55 / Class F or B
	1st Oil separator	■	1	Horizontal drum type primary fine oil separator Shell : Carbon Steel / Design Cord : PED
	Oil cooler	■	1	MYCOM STD Refrigerant Cooled
	Oil filter	■	1	Shell : Carbon Steel For Each Compressor
	Oil heater	■	1	1.5 kW For Each Compressor
	Condenser Air Cooler	■		<div style="border: 1px solid black; padding: 5px;">           For any applicable item, Quantity shall be indicated.            Result: Client requested as per duty specification and MR, number of equipment to be considered         </div>
	Evaporator	□		
	Expansion Valve of Evaporator	■		
	Oil Recovery	■		
	Ko drum	□		
	Dryer Filter	■		
	Suction Filter	■	1	Suction strainer
	Control panel	■	1	Siemens S7-1200 PLC for safe area for complete system
	Instruments IP65, Ex execution	■	1set	1) Suction/Discharge check valves ( SC) 2) Single Safety valve for compressor on oil separators ( CS) 3) ATEX coupling ( main coupling and oil pump) , non sparking 4) Instrumentation Exd and will be As per MYCOM STD 5) Instruments to be mounted locally
	Junction Box Exe	■		Per Mfr Std, qty: 1 pce, Exe  Direct feeder for Package Electrical users to be provided by client

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M-O.  
 J.A. Javid

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**SINGLE STAGE SCREW COMPRESSOR :**

DATE :  
 MODEL : **P125L-M**  
 REFRIGERANT : **PROPANE**  
 RECOMMENDED PORT : **M**  
 BOOSTER : **N**

Design	165 kW
Normal	- kW
Min.	- kW

Vi :	[-]	3.48
COMPRESSION RATIO :	[-]	4.14
CAPACITY :	[kW]	170
CAPACITY :	[TR]	48.3
ABSORBED POWER :	[kW]	73
DRIVE SHAFT SPEED :	[min-1]	2950
COMPRESSOR SPEED :	[min-1]	2950
INDICATOR POSITION :	[%]	100
CONDENSING TEMP. :	[degC]	55
EVAPORATIVE TEMP. :	[degC]	1
SUCTION SUPERHEAT :	[degC]	0
LIQUID SUBCOOLING :	[degC]	0
SUCTION TEMP. :	[degC]	1
OIL SUPPLY TEMP. :	[degC]	50
SUCTION PRESS. :	[MPaA]	0.475
DISCHARGE PRESS. :	[MPaA]	1.97
OIL SUPPLY PRESS. :	[MPaA]	2.17
SUCTION PRES. DROP :	[MPa]	0.01
DISCHARGE PRES. DROP :	[MPa]	0.03
SWEPT VOLUME :	[m3/h]	295
LOAD(SUCTION VOL. FLOW RA [%]		100
DISCHARGE TEMP. :	[degC]	66.4
REFRIG. FLOW RATE SUC. :	[m3/h]	254
REFRIG. FLOW RATE DIS. :	[m3/h]	70.2
REFRIG. FLOW RATE SUC. :	[kg/h]	2623
REFRIG. FLOW RATE DIS. :	[kg/h]	2623
INJECT. OIL FLOW RATE :	[L/min]	21.3
LUB. OIL FLOW RATE :	[L/min]	26
*TOTAL* OIL FLOW RATE :	[L/min]	47.3
OIL HEAT REJECTION :	[kW]	21.9
OIL SPEC HT :	[J/kgK]	1930
OIL DENSITY :	[kg/m3]	880
COP :	[-]	2.33

The correctness of these items is the manufacturer's responsibility  
 Vendor Reply:  
 Closed 2 MOM 1402-10-1

--- SUPER HEAT is NOT counted in refrigeration capacity ---

--- WITH THERMO-SIPHON OIL COOLER ---

M.O.  
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