



**CONCEPTUAL, BASIC and DETAIL DESIGN  
ENGINEERING OF STYRENE PARK OFFSITE**



Document Title: Inspection And Test (ITP)

Document No.: EI027-HSE-VD – QC– ITP– 001-  
R3

Rev. R3

Page 1 of 12

# STYRENE PARK OFFSITE

---

**Document Title**  
**Inspection And Test (ITP)**  
**FOR**  
**Refrigeration Unit-Package (RU)**

Rev.	Issued Date	DESCRIPTION	PREPARED	CHECKED	APPROVED
R3	31-08-2024	IFA	F.SH	M.O	A.M
R2	07-04-2024	IFA	F.SH	M.O	A.M
R1	18-09-2023	IFA	N.B	F.SH	A.M
R0	17-09-2023	IFA	N.B	F.SH	A.M



CONCEPTUAL, BASIC and DETAIL DESIGN  
ENGINEERING OF STYRENE PARK OFFSITE

Document Title: Inspection And Test (ITP)



**ENBR**  
TEKNOLOJİ

Document No.: EI0127-HRC-VD-QC-ITP-001

Rev. R3

Page 2 of 12

**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	x	x				41							
2	x	x	x	x				42							
3	x	x	x	x				43							
4	x	x	x	x				44							
5	x	x	x	x				45							
6	x	x	x	x				46							
7	x	x	x	x				47							
8	x	x	x	x				48							
9				x				49							
10				x				50							
11				x				51							
12				x				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							
40								80							



CONCEPTUAL, BASIC and DETAIL DESIGN  
ENGINEERING OF STYRENE PARK OFFSITE



Document Title: Inspection And Test (ITP)





Document No.: EI0127-HRC-VD-QC-ITP-001

Rev. R3

Page 3 of 12

Table of Contents

<b>1- General</b> .....	<b>4</b>
1.1 Introduction.....	4
1.2 Definitions .....	4
<b>2- Abbreviations</b> .....	<b>4</b>

 	<b>CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE</b>		 
	Document Title: Inspection And Test (ITP)		
Document No.: EI0127-HRC-VD-QC-ITP-001		Rev. R3	Page 4 of 12

## 1. General

### 1.1 Introduction

This document covers Inspection & Test Plan for Refrigeration unit package (RU).

### 1.2 Definitions

The following terms and abbreviations are used in the present document

Item	Correspondences
Project	STYRENE PARK OFFSITE
Client	Pad Jam Polymer Development Company
Purchaser	Petro electric Energy Development Company
Consultant	Gohar Ofogh
Vendor	Ener Teknoloji

## 2. Abbreviations

**H (Hold):** Vendor shall not carry out any fabrication and/ or repair work and any shipment without having inspector's confirmation/comments. Any controls and test without inspector is not allowed. Vendor must notify contractor by E-mail as per defined communication line at least 4 Days before the test date for domestic manufacturers and 7 days for overseas. No deviation is allowed from the above-mentioned issues unless specially approved by Client/Contractor in writing.

**W (Witness):** Vendor must notify contractor of the dedicated inspection activity at least 4 Days before the test date for domestic manufacturers and 7 days for overseas. Inspector's attendance is not mandatory.

**SW (Spot Witness):** At least inspection of 15% of each subjected item shall be done under the supervision of involved inspectors. Relevant inspection notification shall be submitted at the beginning of related activities and in case of any failure, at the first case, inspector's supervision increases to 30% of goods and by the second failure, whole activity shall be witnessed by inspectors.

**R (Review):** Review Documentation is a point in which inspection result shall be reviewed, but presence of involved party at inspection time is not mandatory

**RA (Review Approval):** Includes reviewing of all related reports/certificates which vendor shall provide at each step and vendor shall not proceed his fabrication/test unless receiving inspector's approval.



**CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE**

Document Title: Inspection And Test (ITP)

Document No.: EI0127-HRC-VD-QC-ITP-001



Rev. R3

Page 5 of 12

ROW	Activities	Reference Documents	verifying Document	ACTION				Remarks
				Vendor	PEEDCO	TPA	PJPC	
<b>PIM</b>								
1	Pre-Inspection Meeting	Project Specifications and PO and relevant standards	MOM and approved ITP	H	H	R	H	
<b>Document Review</b>								
2	Submission of Project documents	Project Specifications and VPIS	Approved Procedures	H	RA	R	R	
3	Sub Vendor List	Approved Project AVL (MOP, NPC, POGC)	As per approved sub vendor list	H	RA	R	R	
<b>Compressor Skid</b>								
4	Compressor Block (Visual, Dimensional, Marking and Document Check)	Approved Datasheet/DWG	MYCOM Certificate and test Report ('- Noise test '- Vibration test '- Performance test '-Hydro test)	H	W	H	R	
5	MAIN MOTOR - HELMKE GERMANY	Approved Datasheet	HELMKE Certificate and Test Report	H	W	W	R	
6	PUMP MOTOR-HELMKE GERMANY	Approved Datasheet	HELMKE Certificate and Test Report	H	W	W	R	
7	Instrument Wiring and Function Test for Instruments	JB Wiring	Approved JB and LCP wiring Diagram	H	W	W	R	
8	Inspection of Junction Box, Local Panel	Approved Junction Box and LCP Wiring Diagram and PLC Layout Drawing	TEST REPORT PLC FAT TEST PROCEDURE	H	W	W	R	



CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE

Document Title: Inspection And Test (ITP)

Document No.: EI0127-HRC-VD-QC-ITP-001



Rev. R3

Page 6 of 12

ROW	Activities	Reference Documents	verifying Document	ACTION				Remarks
				Vendor	PEEDCO	TPA	PJPC	
9	Compressor Skids including Oil pump, Oil Filter, Piping, Oil Separator, Valves, Instrumentation, etc (Visual, Dimensional, Painting, Marking and Document Check)	Approved Datasheet/DWG	MYCOM Certificate/ Material Certificate and Test Reports	H	W	H	R	
10	Instrument Wiring and Function Test for Instruments	JB Wiring	Approved JB and LCP wiring Diagram	H	W	W	R	
11	Packing and Marking	Approved Packing and Marking Procedure	Approved Packing List	H	W	H	R	
12	Inspection Release Note (IRN)	PO and Approved ITP	Approved Inspection Reports and Approved Packing List	H	H	H	H	
<b>PLC</b>								
13	Visual, Dimensional, FAT for PLC	PLC Layout Drawing, IO List, PLC Manual	PLC FAT TEST PROCEDURE	H	W	H	H	
14	Packing and Marking	Approved Packing and Marking Procedure	Approved Packing List	H	W	H	R	
15	Inspection Release Note (IRN)	PO and Approved ITP	Approved Packing List	H	H	H	H	
<b>Chiller Skid</b>								
16	Shell and Tube Heat Exchanger (Chiller)	Approved GA and Approved Chiller ITP in Table 1	All sections according to Approved Chiller ITP in Table 1	-	-	-	-	Refer to Table 1
17	Valves For Chiller Skid	Approved GA, Approved PID and 3D Model and Applicable Standard	Manufacturer Test Record and traceable original Certificates	H	W	W	R	



**CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE**

Document Title: Inspection And Test (ITP)

Document No.: EI0127-HRC-VD-QC-ITP-001



Rev. R3

Page 7 of 12

ROW	Activities	Reference Documents	verifying Document	ACTION				Remarks
				Vendor	PEEDCO	TPA	PJPC	
18	Piping For Chiller Skid (Visual, Dimensional, weld check and Hydrotest of pipe spools)	Approved GA, Approved PID and 3D Model	- Traceable original Certificates for Raw Materials -Approved Hydrotest Procedure	H	W	W	R	Note 1
19	Safety Valves	Approved Data Sheet	Traceable original Certificates	H	W	W	R	
20	Smaller components within instrumentation routing, such as TUBING and GASKETS and bolting For chiller Skid	Approved GA and Approved Skid Foundation and PID	Traceable original Certificates	H	W	R	R	Note 1, for applicable items
21	Instrumentation	Approved Data Sheet,	Material Certificates, Dimensional And Construction Dwg, Hazardous Area Certificate Calibration Report (3.1 material certificates)	H	W	W	R	
22	Inspection of Junction Box	Approved Junction Box and LCP Wiring Diagram	TEST REPORT And Certificate	H	W	W	R	
23	Packing and Marking	Approved Packing and Marking Procedure	Approved Packing List	H	W	H	R	
24	Inspection Release Note (IRN)	PO and Approved ITP	Approved Inspection Reports and Approved Packing List	H	H	H	H	



CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE



Document Title: Inspection And Test (ITP)




Document No.: EI0127-HRC-VD-QC-ITP-001

Rev. R3

Page 8 of 12

ROW	Activities	Reference Documents	verifying Document	ACTION				Remarks
				Vendor	PEEDCO	TPA	PJPC	
<b>Air Cooler (Condenser)</b>								
25	Air Cooler (Condenser)	Approved GA and Approved Condenser ITP in Table 2	All sections according to Approved Condenser ITP in Table 2	-	-	-	-	Refer to Table 2
<b>Documentation</b>								
26	Final Data Book (FDB)	Project Final Data Book Procedure	FDB	H	RA	R	RA	

Note 1: Original or true copy of EN 10204 3.1 certificate to be issued (if the original/true copy certificate isn't available, lab test report will be issued).

 	<b>CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE</b>			
	Document Title: Inspection And Test (ITP)			
	Document No.: EI0127-HRC-VD-QC-ITP-001			

**Table 1: ITP for Chiller**

ROW	Activities	Reference Documents	verifying Document	ACTION				Remarks
				Vendor	PEEDCO	TPA	PJPC	
<b>Documentation</b>								
1	Sub Vendor List	Approved Project AVL (MOP & NPC &POGC)	Approved Sub vendor List	H	RA	R	RA	
2	Welding Book (WPS, PQR, NDT Map, NDT Procedure, WQT, NDT Personal cert.)	ASME SEC VIII, V SNT-TC 1A level II	Approved Welding Book	H	RA	R	RA	
3	Hydrotest Test Procedure	Project Specifications / Applicable standard	Approved hydrotest Procedure	H	RA	R	RA	
4	Surface preparation and painting	Project Specifications	Approved Painting Procedure	H	RA	R	RA	
5	Preservation, Packaging, And Shipping Procedure	Project Specifications	Approved Packing Procedure	H	RA	R	RA	
<b>Chiller</b>								
6	Raw Material	Approved Datasheet/DWG and relevant standards	Material Certificate	H	H	H	R	Note 1
7	Cutting	Approved Drawings	Inspection Report	R	SW	SW	R	
8	Welding	Approved WPS/PQR	Inspection Report	H	SW	SW	R	
9	Visual And Dimensional Check	Approved Drawings	VT&DT Report	H	W	W	R	

**CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE**

Document Title: Inspection And Test (ITP)

**ENBR**  
TEKNOLOJI

Document No.: EI0127-HRC-VD-QC-ITP-001

Rev. R3

Page 10 of 12

ROW	Activities	Reference Documents	verifying Document	ACTION				Remarks
				Vendor	PEEDCO	TPA	PJPC	
10	NDT (PT & RTI)	Approved NDT Map and procedure	NDT Report	H	W	W	R	
11	Final Visual and Dimensional Check	Approved Drawings	Final VT&DT Report	H	W	W	R	
12	Hydro Test tube Side	Approved Hydrotest Procedure	Hydrotest Report	H	H	H	W	
13	Hydro Test Shell Side	Approved Hydrotest Procedure	Hydrotest Report	H	H	H	W	
14	Painting and Coating Inspection	Approved Painting Procedure	Paint Report	H	W	W	R	
15	Name Plate Check	Approved Drawing	Inspection Report	H	RA	H	R	
16	Packing and Marking	Approved Packing Marking Procedure	Approved Packing List	H	W	H	R	
17	Inspection Release Note (IRN)	PO and ITP	IRN	R	R	H	R	



**CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE**

Document Title: Inspection And Test (ITP)

Document No.: EI0127-HRC-VD-QC-ITP-001



**ENBR**  
TEKNOLOJI

Rev. R3

Page 11 of 12

**Table 2: ITP for Air Cooler (Condenser)**

ROW	Activities	Reference Documents	verifying Document	ACTION				Remarks
				Vendor	PEEDCO	TPA	PJPC	
<b>Documentation</b>								
1	Sub Vendor List	Approved Project AVL (MOP & NPC &POGC)	Approved Sub vendor List	H	RA	R	RA	
2	Welding Book (WPS, PQR, NDT Map, NDT Procedure, WQT, NDT Personal cert.)	ASME SEC VIII, V SNT-TC 1A level II	Approved Welding Book	H	RA	R	RA	
3	Hydrotest Test Procedure	Project Specifications / Applicable standard	Approved hydrotest Procedure	H	RA	R	RA	
4	Surface preparation and painting	Project Specifications	Approved Painting Procedure	H	RA	R	RA	
5	Preservation, Packaging, And Shipping Procedure	Project Specifications	Approved Packing Procedure	H	RA	R	RA	
<b>Air Cooler (Condenser)</b>								
6	Raw Material	Approved Datasheet/DWG and relevant standards	Material Certificate	H	H	H	R	Note 1
7	Cutting	Approved Drawings	Inspection Report	R	SW	SW	R	
8	Welding	Approved WPS/PQR	Inspection Report	H	SW	SW	R	
9	Visual And Dimensional Check	Approved Drawings	VT&DT Report	H	W	W	R	

**CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE**

Document Title: Inspection And Test (ITP)

**ENBR**  
TEKNOLOJI

Document No.: EI0127-HRC-VD-QC-ITP-001

Rev. R3

Page 12 of 12

ROW	Activities	Reference Documents	verifying Document	ACTION				Remarks
				Vendor	PEEDCO	TPA	PJPC	
10	NDT (PT & RTI)	Approved NDT Map and procedure	NDT Report	H	W	W	R	
11	Final Visual and Dimensional Check	Approved Drawings	Final VT&DT Report	H	W	W	R	
12	Hydro Test	Approved Hydrotest Procedure	Hydrotest Report	H	H	H	W	
13	Painting and Coating Inspection	Approved Painting Procedure	Paint Report	H	W	W	R	
14	Name Plate Check	Approved Drawing	Inspection Report	H	RA	H	R	
15	Packing and Marking	Approved Packing Marking Procedure	Approved Packing List	H	W	H	R	
16	Inspection Release Note (IRN)	PO and ITP	IRN	R	R	H	R	