

VENDOR:



# STYRENE PARK OFFSITE

CLIENT



## WELDING INSPECTION REPORT

OWNER REQ. NO.:

E1027-FPA-VD-QC-NDT-003

PROJECT NO.:

HX127

TAG NO.:

RU0001B-E02

REPORT NO.:

FPA-HX127-RU0001B-E02-VT-001

PAGE:

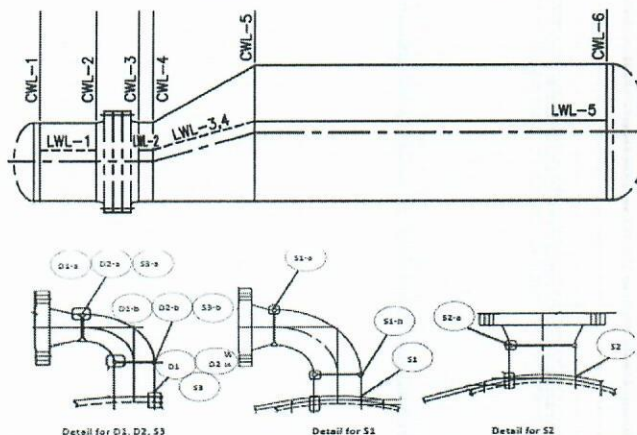
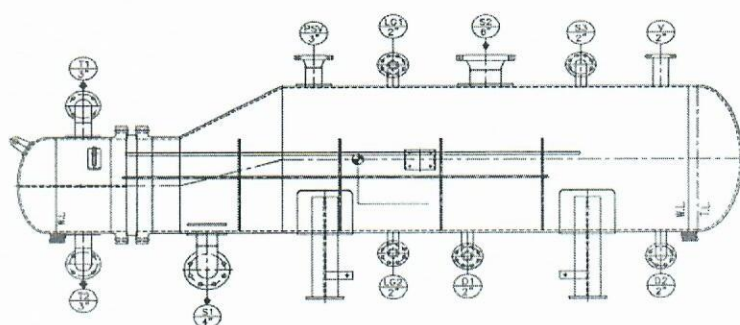
1 OF 2

DATE:

4/1/2025

NO.	Joint No.	WPS NO.:	Material	WELDER STAMP			Result		Remark
			Type 1 / Type 2	ROOT	FILL	CAP	Acc.	Rej	
1	LWL-1	HX-127-WPS-001	SA-516 Gr.70N SA-516 Gr.70N	W-116	W-116	W-119	✓		
2	LWL-2~LWL-4	HX-127-WPS-003	SA-516 Gr.70N SA-516 Gr.70N	W-116	W-115	W-119	✓		
3	LWL-5	HX-127-WPS-004/005	SA-516 Gr.70N SA-516 Gr.70N	W-116	W-115	W-119	✓		
4	CWL-1	HX-127-WPS-004/005	SA-516 Gr.70N SA-516 Gr.70N	W-116	W-115	W-119	✓		
5	CWL-2	HX-127-WPS-002	SA-516 Gr.70N SA-266-2N	W-116	W-115	W-119	✓		
6	CWL-3	HX-127-WPS-002	SA-516 Gr.70N SA-266-2N	W-116	W-115	W-119	✓		
7	CWL-4	HX-127-WPS-002	SA-516 Gr.70N SA-516 Gr.70N	W-116	W-115	W-119	✓		
8	CWL-5,CWL-6	HX-127-WPS-002	SA-516 Gr.70N SA-516 Gr.70N	W-115	W-103	W-119	✓		
9	T1,T2	HX-127-WPS-001	SA-106 Gr.B SA-516 Gr.70N	W-115	W-103	W-119	✓		
10	S1,S2,PSV	HX-127-WPS-001	SA-333 Gr.6 SA-516 Gr.70N	W-119	W-103	W-119	✓		
11	LG1, LG2,D1,D2,S3	HX-127-WPS-001	SA-333 Gr.6 SA-516 Gr.70N	W-119	W-103	W-119	✓		
12	V	HX-127-WPS-001	SA-350 LF2 SA-516 Gr.70N	W-119	W-103	W-119	✓		
13	T1-a,T1-b,T2-a,T2-b	HX-127-WPS-001	SA-106 Gr.B SA 234 WPB6/SA-105A	W-119	W-103	W-119	✓		
14	S1-a,S1-b, S2-a,PSV-a,LG1-a	HX-127-WPS-001	SA-333 Gr.6 SA-420 WPL6/SA350LF2	W-119	W-103	W-119	✓		
15	LG2-a,S3-a	HX-127-WPS-03	SA-333 Gr.6 SA-420 WPL6/SA350LF2	W-119	W-103	W-119	✓		

Sketch.



VENDOR

TPI

OWNER

Name:

Date:

Sing.:



Name:

Date:

Sing.:

*Signature*

Name:

Date:

Sing.:



<b>VENDOR:</b> <b>Farnikan</b> Engineered Solutions	<b>STYRENE PARK OFFSITE</b>  <b>WELDING INSPECTION REPORT</b>	<b>CLIENT</b>  پتروشیمی توسعه پارک صنعتی کوهر انق
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OWNER REQ. NO.: E1027-FPA-VD-QC-NDT-003			PROJECT NO.: HX127	TAG NO.: RU0001B-E02	REPORT NO.: FPA-HX127-RU0001B-E02-VT-001		PAGE: 2 OF 2	DATE: 4/1/2025	
NO.	Joint No.	WPS NO.:	Material	WELDER STAMP			Result		Remark
			Type 1 / Type 2	ROOT	FILL	CAP	Acc.	Rej	
15	LG1-b, LG1-c LG2-b, LG2-c	HX-127-WPS-001	SA-420-WPL6 SA-333 Gr.6	W-119	W-1116	W-115	✓		
16	TTS	HX-127-WPS-003	SA-334-6 SA-350-LF2	W-101	W-101	W-101	✓		
17	FW1	HX-127-WPS-004/005	SA-516 Gr.70 SA-516 Gr.70	W-119	W-1116	W-115	✓		
18	FW2,FW3	HX-127-WPS-004/005	SA-516 Gr.70 SA 283 Gr.c	W-119	W-1116	W-115	✓		
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									

TTS

SEAL WELD

TUBE TO TUBESHEET JOINT

FW1

PARTITION PLATE DETAIL

FW2

FW3



SADDLE DETAIL

Detail for T1, T2

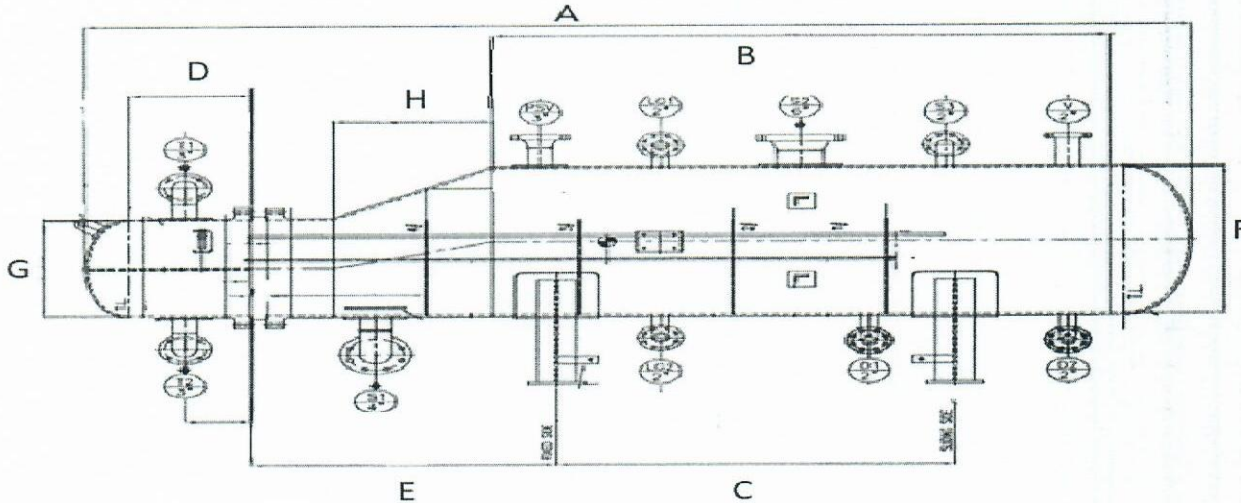
Detail for LG1, LG2

VENDOR	TPI	OWNER
Name: Date: Sing.:	Name: Date: Sing.:	Name: Date: Sing.: 



<div><div><div><div>Vendor</div><div>Farnikan</div><div>Engineered Solutions</div></div></div><div>DWG. NO : EI027-HSE-VD-ME-DWG-008</div><div>Reference Code: ASME Sec VIII DIV 1</div></div>	<div>STYRENE PARK OFFSITE</div> <div>DIMENSIONAL CONTROL SHEET</div>	<div>CLIENT</div> <div><div>پتروشیمی توسعه پاری صنعتی گوهر افق</div></div>	<div>Equipment No.: RU0001B-E-02</div> <div>REPORT NO: FPA-HX127-RU0001B-E02-DIM-001</div> <div>4/20/25</div> <div>SHEET 1 OF 1</div>
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SCHEMATIC DWG.



POS NO.	DIMENSION			ORIENTATION	RESULT	POS NO.	DIMENSION			ORIENTATION	RESULT
	DWG(mm)	ACTUAL(mm)	DEVIATION (mm)				DWG(mm)	ACTUAL(mm)	DEVIATION (mm)		
NOZZLE - S1	ELV.440, PRO.710	ELV.441, PRO.712	ELV.+1, PRO.+2	180°	Acc	A	3947	3947	0	-	Acc
NOZZLE - S2	ELV.1955, PRO.671	ELV.1953, PRO.671	ELV.+2, PRO.0	0°	Acc	B	2200	2201	+1	-	Acc
NOZZLE - T1	ELV.240, PRO.510	ELV.241, PRO.511	ELV.+1, PRO.+1	0°	Acc	C	1420	1422	2	-	Acc
NOZZLE - T2	ELV.240, PRO.510	ELV.241, PRO.512	ELV.+1, PRO.+2	180°	Acc	D	440	440	0	-	Acc
NOZZLE - D1	ELV.705, PRO.630	ELV.702, PRO.631	ELV.+2, PRO.+1	180°	Acc	E	1085	1080	0	-	Acc
NOZZLE - D2	ELV.200, PRO.630	ELV.200, PRO.631	ELV.+1, PRO.+2	180°	Acc	F	925	926	+1	-	Acc
NOZZLE - LG1	ELV.1455, PRO.610	ELV.1455, PRO.610	ELV.-2, PRO.0	0°	Acc	G	600	602	+2	-	Acc
NOZZLE - LG2	ELV.1455, PRO.610	ELV.1455, PRO.610	ELV.-2, PRO.0	180°	Acc	H	565	566	+1	-	Acc
NOZZLE - PSV	ELV.1025, PRO.675	ELV.1021, PRO.676	ELV.+1, PRO.+1	0°	Acc						
NOZZLE - V	ELV.2905, PRO.675	ELV.2907, PRO.672	ELV.+2, PRO.+2	0°	Acc						
NOZZLE - S3	ELV.2470, PRO.630	ELV.2470, PRO.632	ELV.0, PRO.+2	0°	Acc						

NOTE:

<div>FPA QC.</div> <div>NAME:</div> <div>SIGN:</div> <div>DATE:</div>	<div>TPI</div> <div>NAME:</div> <div>SIGN:</div> <div>DATE:</div>	<div>OWNER</div> <div>NAME:</div> <div>SIGN:</div> <div>DATE:</div>
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## RADIOGRAPHY EXAMINATION REPORT



Project: Item No.: RU0001-B-E2

Procedure: E1027-FPA-VD-QC-NDT-003

Code/Standard: ASME Sec VIII

Technique : ☒ SWSI ☒ DWSI ☐ DWDI ☒ Pano  
Film Type : ☒ AA400 ☐ AGFA D4 ☒ MX125 ☐ R 4  
IQI: ☐ 13~19 ☒ 10~16 ☒ 6~12 ☐ 1~7  
Density: ☒ 2~2.5 ☒ 2.5~3 ☒ 3~3.5 ☐ 3.5~4

Source Type:  $\gamma$  ☒ ☐

Source Size :

Source Strength:

Report No:FPA-02

Date: 1.2.1404

Page: 1 of 2

Sensitivity:2% Max

UG:0.5 Max

Row	JOINT.NO	RT NO	SFD	THK(mm)	Welder Stamp	Req No	Weld Length (mm)	Film Length (cm)	Result 1				Result 2				Result 3				Defects Type & Location(cm)
									Acc	Rep	RS	RX	Acc	Rep	RS	RT	Acc	Rep	RS	RT	
1	LWL-1	03		10	115-112	001	300	1(10*35)	✓												
2	LWL-2	12		12	115-112	001	150	1(10*25)	✓												
3	LWL-3	13		12	115-112	001	600	2(10*40)	✓												
4	LWL-4	14		12	115-112	001	2200	61(0*40)	✓												
5	CWL-1	01		10	115-112	001	1960	610*35)2(10*25)	✓				✓								(44~45)SL
6	CWL-2	02		10	115-112	001	1960	6(10*35)3(10*25)	✓				✓								(98~105)LOF
7	CWL-3	08		12	115-112	001	1960	5(10*40)1(10*25)	✓												
8	CWL-4	09		12	115-112	001	1960	6(10*40)4(10*25)	✓												
9	CWL-5	10		12	115-112	001	2980	8(10*40)2(10*25)			✓	✓									(110~130)RS
10	CWL-6	11		12	115-112	001	2980	8(10*40)5(10*25)	✓												(97~98)SL(245~247)PO
11	T1-a	04		8	115-112	001	3"	3(10*15)	✓												
12	T1-b	05		8	115-112	001	3"	3(10*15)	✓												
13	T2-a	06		8	115-112	001	3"	3(10*15)	✓												
14	T2-b	07		8	115-112	001	3"	3(10*15)	✓												
15	S1-a	15		11	115-112	001	4"	3(10*17)			✓				✓	✓					FULL RS
16	S1-b	16		11	115-112	001	4"	3(10*17)	✓												
17	PSV-a	17		11	115-112	001	3"	3(10*15)	✓												
18	LG1-a	18		9	115-112	001	2"	3(10*15)	✓												

Legend

LC: Longitudinal Crack

LOF: Lack of Fusion

CP: Cluster Porosity

PP: Pipe Porosity

SI: Slag Inclusion

RC: Root Concavity

Acc:Accept

TC: Transverse Crack

LOP: Lack of Penetration

PO: Spherical Porosity

CV: Cavities

TI: Tungsten Inclusion

EP: Excess Penetration

RS:Reshoot

SC: Star Crack

RU: Root Undercut

RPO: Random Porosity

WH: Worm Hole

OI: Oxid Inclusion

UF: Under Fill

Rep:Repair

CC: Crater Crack

CU: Cap Undercut

LP: Linear Porosity

PH: Pin Hole

BT: Burn Through

HB: Hollow Bead

RX:Retake

### INTERPRETER

### FPA

### OWNER

### TPI

DATE:

NAME:

SIGN:

DATE:

NAME:

SIGN:

DATE:

NAME:

SIGN:

DATE:

NAME:

SIGN:

M.H. Serpoosh  
ASNT Level II  
VT PT MT UT RT

FAMIKAN PATENT AVENUE  
Quality Control  
FPA

Safarian  
Review









Toase-eh Park Sanati Gohar Ofogh Petrochemical Co.

CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF  
STYRENE PARK OFFSITE



EQUIPMENT NO. HX127-  
RU0001B-E-02

Date:1404/01/21

REPORT NO :E1027-FPA-VD-QC-  
PRO-006-04

PROCEDURE ID: E1027-FPA-VD-QC-NDT-003 REV:00					Acceptance criteria : ASME Sec.VIII							
GROOVE TYPE:					THICKNESS:							
V <input checked="" type="checkbox"/>	U <input type="checkbox"/>	X <input type="checkbox"/>			mm <input checked="" type="checkbox"/>	07-13						
K <input type="checkbox"/>	Y <input type="checkbox"/>	OTHER <input checked="" type="checkbox"/>			Inch <input type="checkbox"/>							
SURFACE CONDITION:					WELDING PROCESS:							
AS WELD <input checked="" type="checkbox"/>	AS FORGED <input type="checkbox"/>	AS CAST <input type="checkbox"/>			SMAW <input checked="" type="checkbox"/>	GMAW <input type="checkbox"/>	GTAW <input checked="" type="checkbox"/>					
AS MACHINED <input type="checkbox"/>	AS GRANDED <input type="checkbox"/>	OTHER <input type="checkbox"/>			FCAW <input type="checkbox"/>	SAW <input type="checkbox"/>	OTHER <input type="checkbox"/>					
EQUIPMENT					SEARCH UNIT:							
MAKER: TIME					MAKER: WMB		FREQUENCY: 4MHZ		TYPE & SIZE: 0°,60°,70° , 20x22			
MODEL:TUD 360					SEARCH UNIT CABLE(S):							
ID NO:10911000001					TYPE:WMB		Lenght:1500					
TEST BLOCKS:					COUPLANT:							
CALIBRATION : V1,ASME Block					OIL <input type="checkbox"/>	GREASE <input type="checkbox"/>	GLYCERIN <input type="checkbox"/>					
BASIC MATERIAL: S.S&CS					SCA <input type="checkbox"/>	WATER <input type="checkbox"/>	OTHER <input checked="" type="checkbox"/>					
EQUIPMENT FUNCTION:					EXAMINATION METHOD							
SCREEN HIGH LINEARITY: ±1%					PULSE-ECHO <input checked="" type="checkbox"/>	STRAIGHT BEAM <input type="checkbox"/>	ANGLE BEAM <input checked="" type="checkbox"/>					
AMPLITUDE CONTROL LINEARITY: ±1%					IMMERSION <input type="checkbox"/>	CONTACT <input checked="" type="checkbox"/>	TROUGH TRANSMISSION <input type="checkbox"/>					
NO.	ITEM	JOINT	SIZE	SCAN AREA	DEFECT LOCATION			INTERPRETATION		REPAIRS		REMARKS
					X	L	D	ACCEPT	REJECT	ACCEPT	REJECT	
1	CHILLER	T1	3"	-	-	-	-	✓				
2	CHILLER	T2	3"	-	-	-	-	✓				
3	CHILLER	S1	4"	-	-	-	-	✓				
4	CHILLER	S2	6"	-	-	-	-	✓				
5	CHILLER	PSV	3"	-	-	-	-	✓				
6	CHILLER	LG1	2"	-	-	-	-	✓				
7	CHILLER	LG2	2"	-	-	-	-	✓				
8	CHILLER	D1	2"	-	-	-	-	✓				
9	CHILLER	D2	2"	-	-	-	-	✓				
10	CHILLER	S3	2"	-	-	-	-	✓				
11	CHILLER	V	2"	-	-	-	-	✓				
Judgment : Satisfactory <input checked="" type="checkbox"/> unsatisfactory <input type="checkbox"/>												
INTERPRETER			FARNIKAN QC.			OWNER			TPI			
NAME			NAME			NAME			NAME			
DATE			DATE			DATE			DATE			
SIGNATURE			SIGNATURE			SIGNATURE			SIGNATURE			





Toase-eh Park Sanati Gohar Ofogh Petrochemical Co.

CONCEPTUAL, BASIC and DETAIL DESIGN  
ENGINEERING OF STYRENE PARK OFFSITE

### LIQUID PENETRANT TEST REPORT



EQUIPMENT NO.: RU0001B-E-02

Date: 04/21/2025

REPORT No.: E1027-FPA-VD-QC-PRO-006-02

Page 1 of 1

Applicable code : ASME Sec.VIII DIV.1 & ASME V

Procedure ID: E1027-FPA-VD-QC-NDT-003

#### Stage of Examination

Material: C.S.

Prepared Edge:

After P.W.H.T  
After Hydro .test

☐ As welded  
☐ Others



Surface preparation : Grinding ☐

Machining ☐

Power Brush ☒

Others ☐

Penetrant

Type



Color Contrast

☐ Fluorescent

Application



Brushing

☒ Spraying

Temperature : ambient temp.

Penetrate time: 10 Minutes

Penetrant Designation:  
MAGNAFLUX SKL-SP2

Removal



Water Washable Penetrant



Post Emulsifying Penetrant



Solvent Removable Penetrant

Removal Designation:  
MAGNAFLUX SKC-S

Developing



Dry developer



Wet developer

Developing Designation:  
MAGNAFLUX SKD-S2

Row	Joint NO.	THK (mm)	Defect Type (Linear Or Rounded)	Location	Dimension (mm)	Result 1		Result 2	
						Accept	Reject	Accept	Reject
1	T1	10				✓			
2	T2	10				✓			
3	S1	12				✓			
4	S2	12				✓			
5	PSV	12				✓			
6	LG1	12				✓			
7	LG2	12				✓			
8	D1	12				✓			
9	D2	12				✓			
10	S3	12				✓			
11	V	12				✓			
12	FW1	10				✓			
13	FW2	10				✓			
14	FW3	10				✓			
15	TTS	8				✓			
16									
17									
18									
19									
20									
21									

NOTE :

Judgment : ☐

Satisfactory ☒

unsatisfactory ☐

INTERPRETER

FARNIKAN QC.

TPI

OWNER

NAME:

DATE:

SIGNATURE

NAME:

DATE:

SIGNATURE

NAME:



DATE:

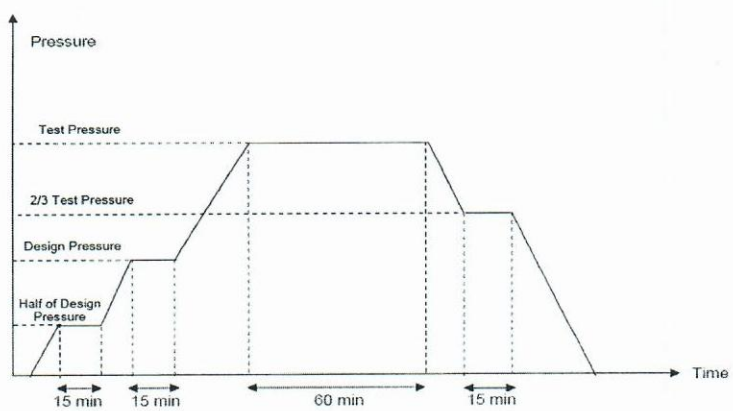
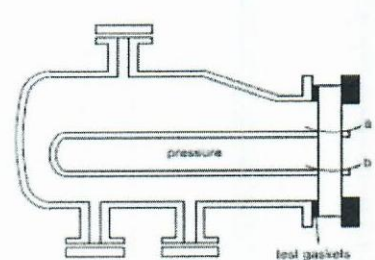
SIGNATURE



NAME:

DATE:

SIGNATURE:

Vendor:  <b>Farnikan</b> Engineered Solutions	<b>STYRENE PARK OFFSITE</b>  <b>HYDROSTATIC TEST REPORT</b>	CLIENT  پتروشیمی توسان پارس صنعتی گسترش پارس	REPORT NO.: FPA-HX127-RU0001B-E02-- HY-001  DATE: 4/23/2025  PAGE 1 OF 3
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ITEM NO.: RU0001B-E02 (Shell Side)	REFERENCE CODE: ASME SEC VIII DIV.1		
TEST PRESSURE : 28.6 Barg			
DESIGN PRESSURE: 22 Barg			
PROCEDURE APPLIED : E1027-FPA-VD-QC-PRO-007			
TEST FLUID                      Tap Water			
HOLDING TIME	D. P.:    15 Minute	T.P.: 60 Minute	FLUID TEMP.: 15°C
METAL SURFACE TEMP (°C): 18		EXTERNAL TEMP.(°C): 23	AMBIENT TEMP.(°C): 17
GAUGES EMPLOYED :		GAUGE No1: 100 (DA151450)	GAUGE No2: 100 (DA151452)
CALIBRATION FORM NO.: P-1403/290 - P-1403/298			TERMOMETER: 62 MAX+
TEST RESULT : ACCEPTED <input checked="" type="checkbox"/> NOT ACCEPTED <input type="checkbox"/>			
REMARK :  <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>The graph shows the pressure profile over time. It starts with a 15 min ramp to Half of Design Pressure, followed by a 15 min hold. Then it ramps to Test Pressure, holds for 60 min, and finally ramps down over 15 min. Key pressure levels marked are Half of Design Pressure, Design Pressure, 2/3 Test Pressure, and Test Pressure.</p> </div> <div style="text-align: center;">  <p>The schematic shows a horizontal vessel with a U-tube manometer. Test gaskets are indicated at points 'a' and 'b' on the right side of the vessel.</p> </div> </div>			

FPA CO.	TPI	OWNER
NAME  DATE SIGN.	NAME  DATE SIGN.	NAME  DATE  SIGN.



Vendor:


**Farnikan**  
Engineered Solutions

**STYRENE PARK OFFSITE**

CLIENT


**REPORT NO.:**  
FPA-HX127-RU0001B-E02-HY-001

DATE: 4/23/2025

PAGE 2 OF 3

**HYDROSTATIC TEST REPORT**

ITEM NO.: RU0001B-E02 (Tube Side)

REFERENCE CODE: ASME SEC VIII DIV.1

TEST PRESSURE : 8.84 Barg

DESIGN PRESSURE: 6.8 Barg

PROCEDURE APPLIED : E1027-FPA-VD-QC-PRO-007

TEST FLUID Tap Water

HOLDING TIME

D. P.: 15 Minute

T.P.: 60 Minute

FLUID TEMP.: 17°C

METAL SURFACE TEMP (°C): 18

EXTERNAL TEMP.(°C): 22

AMBIENT TEMP.(°C): 20

GAUGES EMPLOYED :

GAUGE No1: 25(DA142798)

GAUGE No2: 25(DA110914)

CALIBRATION FORM NO.: P-1403/52320- P-1403/1262

TERMOMETER: 62 MAX+

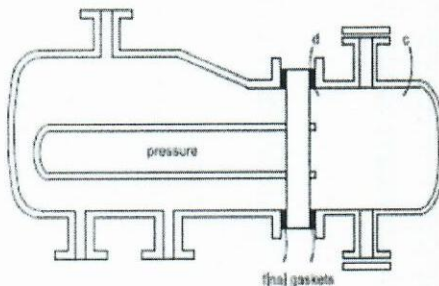
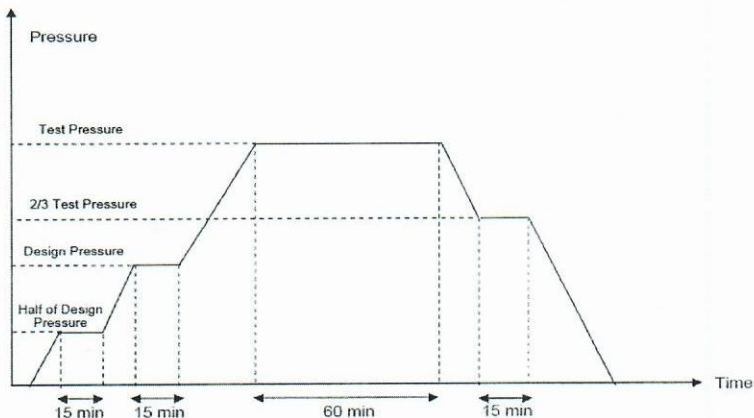
TEST RESULT : ACCEPTED



NOT ACCEPTED



REMARK :



FPA CO.

TPI

OWNER

NAME

DATE

SIGN.

NAME

DATE

SIGN.

NAME

DATE

SIGN.



*[Signature]*  
Sajadian



Vendor:


**Farnikan**  
 Engineered Solutions

**STYRENE PARK OFFSITE**
**HYDROSTATIC TEST REPORT**

CLIENT



REPORT NO.:

 FPA-HX127-RU0001B-E02-  
 HY-001

DATE: 4/23/2025

PAGE 3 OF 3

ITEM NO.: RU0001B-E02 (Shell Side)(Test of gasket between shell and tube-sheet)

REFERENCE CODE: ASME SEC VIII DIV.1

TEST PRESSURE : 28.6 Barg

DESIGN PRESSURE: 22 Barg

PROCEDURE APPLIED : E1027-FPA-VD-QC-PRO-007

TEST FLUID Tap Water

HOLDING TIME

D. P.: 15 Minute

T.P.: 60 Minute

FLUID TEMP.: 14°C

METAL SURFACE TEMP (°C): 18

EXTERNAL TEMP.(°C): 23

AMBIENT TEMP.(°C): 17

GAUGES EMPLOYED :

GAUGE No1: 100 (DA151450)

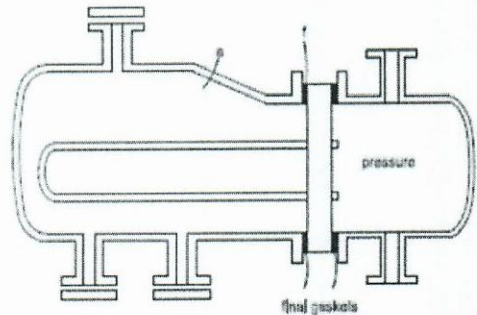
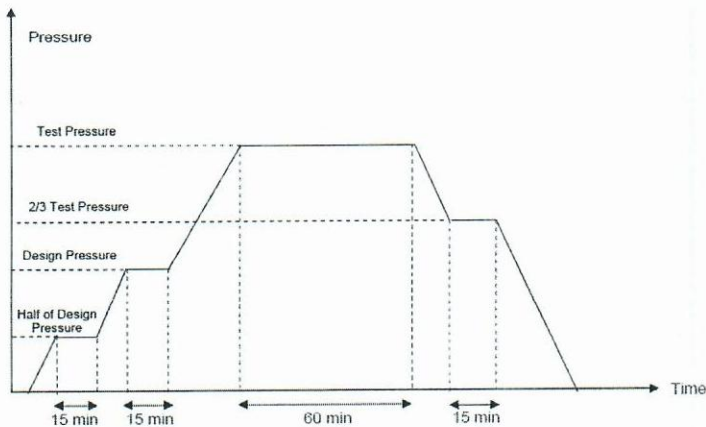
GAUGE No2: 100 (DA151452)

CALIBRATION FORM NO.: P-1403/290 - P-1403/298

TERMOMETER: 62 MAX+

TEST RESULT : ACCEPTED ☒NOT ACCEPTED ☐

REMARK :



FPA CO.

TPI

OWNER

NAME

NAME

NAME

DATE

DATE



DATE

SIGN.

SIGN.

SIGN.





Vendor: 	<b>STYRENE PARK OFFSITE</b>		Owner: 	Report No. : FPA-HX127-RU0001B-E02-PA-001
	<b>PAINTING INSPECTION REPORT</b>			Date: 4/11/2025
				SHEET 1 OF 1

Contract No.:		-							P.O.No.:		EI027-FPA-VD-QC-PRO-008							
Project No.:	HX 127			Item No.:	RU0001B-E02				Paint Specification No.:		Project Spec							
Paint Layer	As per Spec:			Humidity (%)	Amb. temp. °C		Surface Temp. °C		Dew Point (°C)	MEK. Test:		Adhesion		Total DFT µm	Measured DFT µm			Manufacture Batch No.
	Paint Type	DFT µm	Ral No.		Min.	Max.	Min.	Max.		Acc.	Rej.	Acc.	Rej.		Min.	Max.	Ave.	
Primer:	Zinc Rich Epoxy	70	-	21%	20	24	20	25	4	-	-	Acc.	-	70	65	80	72	14031222
Intermediate	Epoxy polyamide MIO filled	100	-	20%	18	24	18	20	5	-	-	Acc.	-	170	164	175	169	14031153
Top Coating	Aliphatic Polyurethane	50	7038	24%	16	23	18	24	4	-	-	Acc.	-	225	218	235	226	14031220

JUDGEMENT:	SATISFACTORY	<input checked="" type="checkbox"/>	UNSATISFACTORY	<input type="checkbox"/>
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<b>FPA QC.</b>	<b>TPI</b>	<b>OWNER</b>
NAME: DATE: SIGNATURE:	NAME: DATE: SIGNATURE:	NAME: DATE: SIGNATURE:





Vendor: 	<b>STYRENE PARK OFFSITE</b>  <b>Tube Expanding Report</b>	<b>CLIENT</b> 	Equipment No.: <b>RU0001B-E-02</b>  Report No.: <b>FPA-HX127- RU0001B-E-02-EXP-001</b>  Date: <b>4.20.2025</b>  Page 1 of 1
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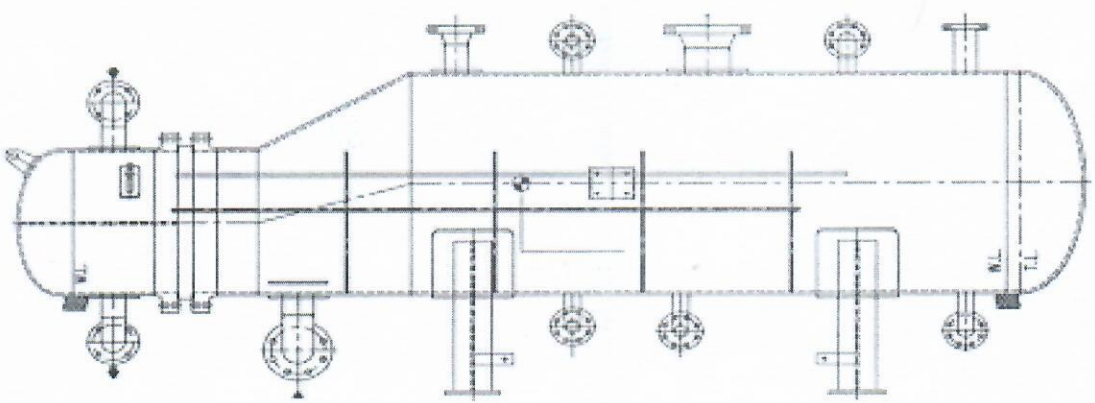





DWG No: EI027-HSE-VD-ME-DWG-008

MATERIAL		TUBE: SA-334-6	TUBE OD	19.05	EXPANDING RATIO(%) = $[1 - \frac{(dh-di')}{(do-di)}] * 100$	
		TUBESHEET: SA-350-LF2 CL1				
NO.	TUBESHEET HOLE (mm)- d <sub>h</sub>	TUBE OD BEFORE EXPANDING (mm)-d <sub>o</sub>	TUBE ID BEFORE EXPANDING (mm)-d <sub>i</sub>	TUBE ID AFTER EXPANDING (mm)-d <sub>i</sub> '	%	REMARKS
1	19.30	19.05	15.75	16.20	6	
2	19.30	19.05	15.78	16.20	5	
3	19.30	19.05	15.82	16.30	7	
4	19.30	19.06	15.68	16.10	5	
5	19.32	19.05	15.74	16.20	6	
6	19.30	19.05	15.71	16.20	7	
7	19.31	19.06	15.81	16.30	7	
8	19.30	19.05	15.75	16.20	6	
9	19.30	19.07	15.75	16.20	7	
10	19.32	19.05	15.78	16.24	6	
11	19.30	19.05	15.74	16.21	7	
12	19.31	19.06	15.75	16.20	6	
13	19.30	19.05	15.75	16.20	6	
14	19.31	19.05	15.72	16.14	5	
15	19.30	19.05	15.71	16.20	7	

NOTE:

JUDGMENT:      SATISFACTORY <input checked="" type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>		
FPA QC	TPI	OWNER
NAME DATE SIGN: 		NAME DATE SIGN:



<p>Vendor:</p> <div style="text-align: center;">  <b>Farnikan</b>          Engineered Solutions       </div>	<h2 style="margin: 0;">N2 PURGING REPORT</h2>	<p>OWNER</p> <div style="text-align: center;">           پتروشیمی توسعه پارک          صنعتی گوهر الماس       </div>	<p>REPORT NO.: FPA-QC-HX 127-N2-001</p> <hr/> <p>Data :5/13/2025</p> <hr/> <p>Page 1 of 1</p>
<p>ITEM NUMBER: RU0001B -E02</p>			
<p>INITIAL PURGING PRESSURE: 0.5 Barg</p>			
<p>FINAL PURGING PRESSURE : 0.5 Barg</p>			
<p>PROCEDURE APPLIED:</p>			
<p>GAS PURITY: 99.99%</p>		<p>GAS TEMP. (C°) -</p>	
<p>INITIAL HOLDING TIME: 15 Min</p>	<p>FINAL HOLDING TIME: 30 Min</p>	<p>EXTERNAL TEMP.(C°): 17 °c Ambient Temp.</p>	
<p>GAUGES EMPLOYED RANGE: 2.5Barg</p>	<p>INITIAL GAUGE PRESSURE: 1 Barg</p>	<p>FINAL GAUGE PRESSURE:1 Barg</p>	
<p>CALIBRATION FORM NO.: -</p>		<p>THERMOMETER: 60 MAX +</p>	
<p>RESULT :    ACCEPTED    <input checked="" type="checkbox"/>                      NOT ACCEPTED                      <input type="checkbox"/></p>			
<p>REMARK :</p> <div style="text-align: center;">  </div>			
<p><b>FPA QC.</b></p>	<p><b>OWNER</b></p>	<p><b>TPI</b></p>	
<p>NAME: </p> <p>DATE: </p> <p>SIGN. </p>	<p>NAME:</p> <p>DATE:</p> <p>SIGN.</p>	<p>NAME:</p> <p>DATE: </p> <p>SIGN. </p>	