# STYRENE PARK OFFSITE

## Document Title:

## Process Flow Diagram

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|---|---|---|---|---|---|
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| R0 | 20/02/2024 | Issued for Comment | M.Tavakoli | E.Malek | H.Keshmiri |
| **Rev.** | **Issued Date** | **DESCRIPTION** | **PREPARED** | **CHECKED** | **APPROVED** |

| Page | Revisions | | | | | | |
|---|---|---|---|---|---|---|---|
| | R0 | R1 | R2 | R3 | R4 | R5 | R6 |
| 1 | X | | | | | | |
| 2 | X | | | | | | |
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| Page | Revisions | | | | | | |
|---|---|---|---|---|---|---|---|
| | R0 | R1 | R2 | R3 | R4 | R5 | R6 |
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Tag numbers shall be according to project documents

Operating pressure shall be revised based on the "Process Duty Specification for Activated Carbon Package"

All legend shall be introduced.

Tags outside of the package battery limit shall be in accordance with the priject P&ID/PFD

PK-0001-F1
AIR CARBON FILTER
OP. T. = 5/52 C
OP. P. = 0.07 barg

PK-0001-F2
AIR AFTER FILTER
OR. T. = 5/52 C
OP. P. = 0.04 barg

This value has discrepancy with the "Process Duty Specification for Activated Carbon Package"

PK-0001
AIR FILTER PACKAGE

PK-0001-F1

Note2

PK-0001-F2

Shall be deleted

STYRENE TANK

101
Note1

102

EXHAUST FAN

Equipment location shall be according to final PFD of the project.

| STREAM NUMBER | | 101 | 102 |
|---|---|---|---|
| Service | | Air + Styrene | Air+Styrene |
| Vapor Frac. | | 1.0000 | 1.0000 |
| Temperature | C | 5/52 | 5/52 |
| Pressure | barg | 0.07 | 0.00 |
| Normal Flow(Note1) | Nm3/hr | 1080 | 1080 |
| Density | kg/m3 | 1.107 / 1.295 | 1.107 / 1.295 |
| Molecular Weight | kmol/kg | 29.03 | 29.03 |
| COMPOSITION | %wt | | |
| Styrene | | 3.5 g/Nm3 | <50 mg/Nm3 |
| Air | | balanced | balanced |

These values has discrepancy with the "Process Duty Specification for Activated Carbon Package"

| REFERENCE DRAWING | DWG NO. | REV. |
|---|---|---|
| | | |
| | | |

LEGENDS :

Carbon Filter

Cartridge Filter

NOTES :

1. Feed stream is intermittent at loading time of upstream styrene storage tank.
2. Non-regenerable Carbon Active.

KEY PLAN :

BINA logo shall be removed in all pages

| REV. | ISSUE DATE | DESCRIPTION | PREPARED | CHECKED | APPROVED | COMPANY |
|---|---|---|---|---|---|---|
| R0 | 20-Feb-24 | Issued for Comment | M.T. | E.M. | H.K. | HRCO |

CLIENT: پتروشیمی توسعه پارک صنعتی گوهر افق

CONSULTING ENGINEER: BINA EPC CONTRACTOR CO.

VENDOR: ENER TEKNOLOJI / HAMOON RAH

PROJECT: STYRENE PARK OFFSITE

DRAWING TITLE: Process Flow Diagram

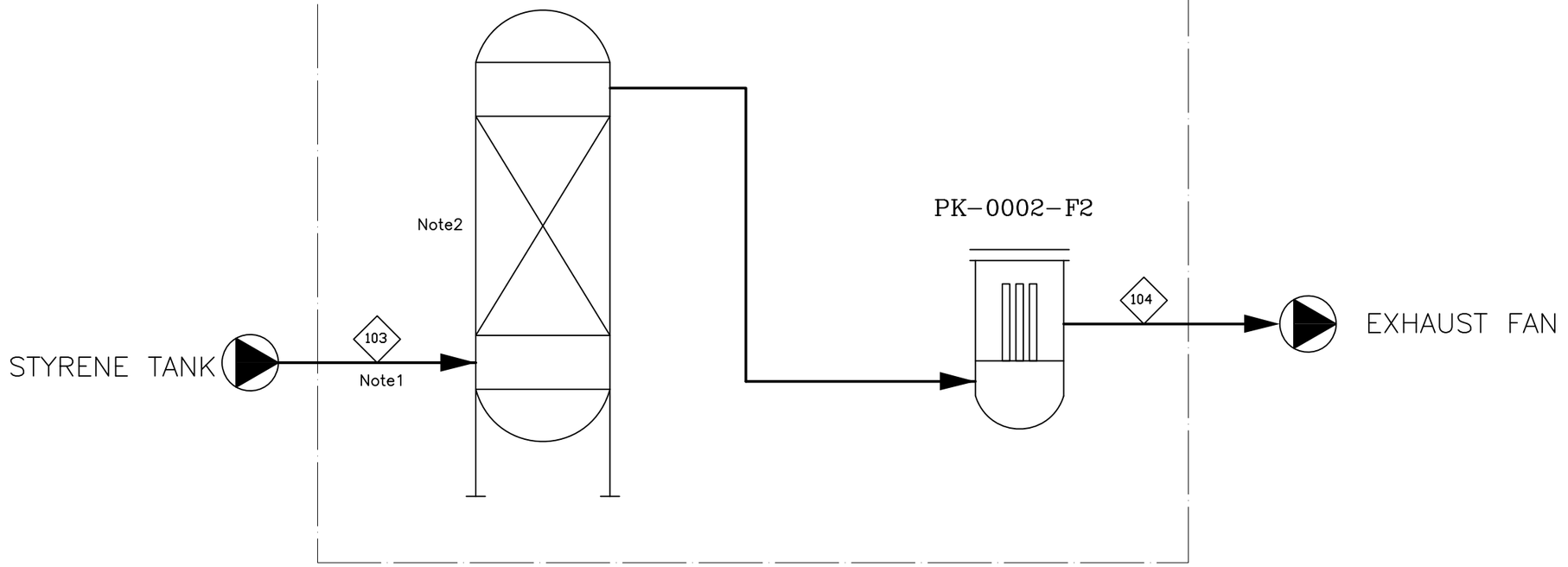
| DRAWING NO. | REV. | SIZE | SCALE | SHEET |
|---|---|---|---|---|
| EI0127-HRC-VD-PR-PFD-002 | R0 | A3 | NTS | 3 of 4 |

PK–0002–F1
AIR CARBON FILTER
OP. T. = 5/52 C
OP. P. = 0.07 barg

PK–0002–F2
AIR AFTER FILTER
OP. T. = 5/52 C
OP. P. = 0.04 barg

Refer to above comments

PK–0002
AIR FILTER PACKAGE




| STREAM NUMBER | | 103 | 104 |
|---|---|---|---|
| Service | | Air + Styrene | Air+Styrene |
| Vapor Frac. | | 1.0000 | 1.0000 |
| Temperature | C | 5/52 | 5/52 |
| Pressure | barg | 0.07 | 0.00 |
| Normal Flow(Note1) | Nm3/hr | 1080 | 1080 |
| Density | kg/m3 | 1.107 / 1.295 | 1.107 / 1.295 |
| Molecular Weight | kmol/kg | 29.03 | 29.03 |
| COMPOSITION | %wt | | |
| Styrene | | 3.5 g/Nm3 | <50 mg/Nm3 |
| Air | | balanced | balanced |

| REFERENCE DRAWING | DWG NO. | REV. |
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1. Feed stream is intermittent at loading time of upstream styrene storage tank.
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| EI0127–HRC–VD–PR–PFD–002 | R0 | A3 | NTS | 4 of 4 |