



Toase-eh Park Sanati Gohar Ofogh Petrochemical Co.

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



Document Title: Equipment Data Sheet Basket Filter

Document No. : EI027-ENR-VD-ME-DSH-002

Rev.: R2

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STYRENE PARK OFFSITE

Document Title:

Equipment Data Sheet Basket Filter

R2	14/04/2024	Issued for Comment	M.Tavakoli	E.Malek	H.Keshmiri
R1	08/04/2024	Issued for Comment	M.Tavakoli	E.Malek	H.Keshmiri
R0	19/02/2024	Issued for Comment	M.Tavakoli	E.Malek	H.Keshmiri
Rev.	Issued Date	DESCRIPTION	PREPARED	CHECKED	APPROVED



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Page	Revisions						
	R0	R1	R2	R3	R4	R5	R6
1	X	X	X				
2	X	X	X				
3	X	X	X				
4	X	X	X				
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General

1	Items	QTY	STYRENE VENT FILTER PACKAGE	2
2	Tags		PK0001-A/B	
3	Service		VOC abatement from styrene storage tank effluent	

Process Data

Item	Description	Unit	Value	Rev.
4	Max. Ambient Design Temperature.	°C	85	
5	Expected Extreme Temperature	°C	52	
6	Min. Ambient Temperature	°C	5	
7	Max. Relative Humidity	%	80	
8	Min. Relative Humidity	%	65	

Process Data

Item	Description	Unit	Value	Rev.
9	Type of Fluid		Air+Styrene (3.5 g/Nm3)	
10	Flow Rate (Operating/Design)	/hr	1080 / 1188 (Note 1)	
11	Working Temperature		15	
12	Working Pressure (norm / max operating)	barg	-0.08 / 0.02	
13	Design Temperature	°C	85	
14	Design Pressure	barg	3.5	
15	Viscosity (Min./Max)	cP	0.02	
16	Density (Min./Max)	Kg/m3	1.2	2
17	Particle Size	Micron	5µ and more	
18	Efficiency	%	95.0	
19	Dirty / Clean pressure drop	bar	0.1 / 0.06	
20	Insulation		No	

PR CM: Previous comment is still applicable. Beside the vendor shall send reply sheet with every new revision of the documents

Mechanical Data

Item	Description	Unit	Value	Rev.
21	Filter Type		basket	
22	Shell Inside Diameter	mm	445.2	2
23	Shell Length (T.L. / W.L.)	mm	1500	
24	Thickness (SHELL / HEAD)	mm	6 / 5.56 (Min. A.F.)	
25	Corrosion allowance	mm	3.0	
26	Radiography (SHELL / HEAD)		Spot / Standard Cap	2
27	Joint Efficiency (SHELL / HEAD)	%	85 / 100	2
28	MDMT (Required / Calculated)	°C	-5 / -29	
29	MAWP	barg	13.552	
30	Hydrostatic Test Pressure	barg	17.62 (Ver.)	2
31	PWHT	-	No	
32	Impact test	-	No	
33	Painting		Acco. To Painting Spec.	
34	Fabricated Weight	Kg	498	2
35	Operating Weight	Kg	565	2
36	Shop Test Weight	Kg	743	2
37	Ladder and Platform Weight	Kg	N/A	



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Material

Item	Description	Value	Rev.
1	Shell	SA 516 Gr.70	2
2	Cap / Fittings	SA 234 GR.WPB	
3	Reinforcing Pad	SA 516 Gr.70	
4	Leg	SA 36	
5	Nozzle Neck and Pipe	SA 106 Gr. B	
6	Forgings (including Flanges, etc)	SA 105	
7	Gasket	Spiral Wound (S.S.304 / Graphite)	
8	Basket	S.S 304	2
9	Stud Bolt & Nut (External)	SA 193 Gr.B7 & SA 194 Gr.2H	
10	Stud Bolt & Nut (Internal)	SA 193 Gr.B8 & SA 194 Gr.8	

Nozzels

Item	Description	QTY	Size	Type	Rating	Face	SCH	Rev.
11	N1 Vent	1	1"	THRD.	6000	-	- / -	
12	N2 Drain	1	2"	S.O.	150	R.F.	160 / -	
13	N3 Gas inlet	1	6"	S.O.	150	R.F.	STD / -	
14	N4 Gas outlet	1	6"	S.O.	150	R.F.	STD / -	
15	Opening for Basket removing	1	18"	S.O.	150	R.F.	- / -	2

Accessories

Item	Description	Rev.
16	<input checked="" type="checkbox"/> Nameplate	
17	<input checked="" type="checkbox"/> Lifting Lug	
18	<input checked="" type="checkbox"/> Earth Lug	
19	<input type="checkbox"/> Ladder and Platform	
20	<input checked="" type="checkbox"/> Internals (Cartridges and Supports)	
21	<input checked="" type="checkbox"/> Davite	

Notes

1- Feed stream is intermittent at loading time of upstream styrene storage tank.