

Annexure-I

Design Data Deethanizer

Pressure, kg/cm ² g				
Top	21.54			
Bottom	22.02			
Reflux Drum	21.3			
Temperature, °C	CASE 1	CASE 1A	CASE 2	CASE 2A
Bottoms	70.4	67.6	70.5	67.6
Green Oil Return	-22.5	-22.6	-22.9	-22.9
Lower Feed	14.8	15.4	14.9	15.6
Upper Feed	-8.1	-6.9	-8.4	-7.1
Overhead	-16.3	-16.2	-16.6	-16.6
Reflux	-17.2	-17.2	-17.5	-17.5
Deethanizer Reboiler Inlet	67.5	65.2	67.5	65.2
Deethanizer Reboiler Outlet	70.4	67.6	70.5	67.6
Reflux Drum	-17.5	-17.5	-17.8	-17.8
Flow, kg/hr				
Reflux	25,958	28,976	25,174	28,294
Tower Overhead	68,713	71,951	67,059	70,398
Reflux Drum Overhead	42,755	42,975	41,885	42,104
Bottoms	15,807	17,941	15,582	17,779
Lower Feed	37,171	38,694	36,482	38,045
Upper Feed	20,015	20,835	19,644	20,486
Green Oil Return	1,375	1,386	1,340	1,351
Reboiler Circulation	104,661	111,897	101,264	108,849

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Stream Description		Deethanizer Upper Feed				Deethanizer Lower Feed				Deethanizer Bottom				Deethanizer Overhead				C2 Green Oil to DE			
Stream number		4000				3053				4015				4001				4030			
Design Case		Case 1	Case 1A	Case 2	Case 2A	Case 1	Case 1A	Case 2	Case 2A	Case 1	Case 1A	Case 2	Case 2A	Case 1	Case 1A	Case 2	Case 2A	Case 1	Case 1A	Case 2	Case 2A
Component	Weight %																				
Hydrogen		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbon Monoxide		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbon Dioxide		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrogen Sulfide		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Methane		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acetylene		0.74	0.71	0.86	0.83	0.74	0.71	0.86	0.83	0	0	0	0	0.86	0.85	1.02	1	0	0	0	0
Ethylene		48.10	46.53	48.94	47.25	48.10	46.53	48.94	47.25	0	0	0	0	62.99	62.91	64.35	64.26	53.32	53.45	54.81	54.92
Ethane		23.49	22.60	22.41	21.52	23.49	22.60	22.41	21.52	0	0	0	0	36.06	36.15	34.54	34.65	46.53	46.40	45.04	44.93
Propadiene/Methylacetylene		1.00	0.96	1.05	1.01	1.00	0.96	1.05	1.01	3.63	3.17	3.80	3.32	0	0	0	0	0	0	0	0
Propylene		13.50	16.88	13.72	17.21	13.50	16.88	13.72	17.21	48.75	55.91	49.32	56.55	0.09	0.09	0.09	0.09	0.15	0.15	0.15	0.15
Propane		3.20	3.16	2.85	2.84	3.20	3.16	2.85	2.84	11.58	10.47	10.27	9.36	0	0	0	0	0	0	0	0
Butadiene/C4 Acetylene		3.25	3.06	3.57	3.36	3.25	3.06	3.57	3.36	11.76	10.14	12.87	11.05	0	0	0	0	0	0	0	0
Butylenes		3.48	3.28	3.37	3.18	3.48	3.28	3.37	3.18	12.58	10.88	12.15	10.48	0	0	0	0	0	0	0	0
Butanes		1.53	1.44	1.41	1.32	1.53	1.44	1.41	1.32	5.53	4.77	5.07	4.36	0	0	0	0	0	0	0	0
C5 Hydrocarbons		1.22	1.04	1.29	1.1	1.22	1.04	1.29	1.1	4.41	3.44	4.66	3.61	0	0	0	0	0	0	0	0
C6 Non Aromatics		0.1	0.07	0.08	0.06	0.1	0.07	0.08	0.06	0.36	0.22	0.3	0.19	0	0	0	0	0	0	0	0
C7 Non Aomatics		0	0	0	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0
C8 Non Aromatics		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Benzene		0.38	0.29	0.42	0.32	0.38	0.29	0.42	0.32	1.36	0.95	1.50	1.05	0	0	0	0	0	0	0	0
Toluene		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04	0.03	0.04	0.03	0	0	0	0	0	0	0	0
Xylene/Ethylbenzene		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Styrene		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C9 - 204 C		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204 - 288 C (PGO)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
288 C Plus (PFO)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Steam/Water		0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrogen		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Naphtha		0		0	0	0		0	0	0		0	0	0	0	0	0	0	0	0	0
TOTAL STREAM																					
Mass Flow	kg/h	20015	20835	19644	20486	37171	38694	36482	38045	15807	17941	15582	17779	68713	71951	67059	70398	1375	1386	1340	1351
Molar Flow	kg mol/hr	623.4	644.4	612	633	1157.7	1197	1136.5	1176	337.2	390	332	386	2391.1	2504	2336.2	2452	47	47.9	46.3	47
Molecular Weight		32.11	32.33	32.10	32.34	32.11	32.33	32.10	32.34	46.87	46.02	46.92	46.03	28.74	28.74	28.70	28.71	28.97	28.97	28.94	28.94
Temperature	°C	-8.1	-6.9	-8.4	-7.1	14.8	15.4	14.9	15.6	70.4	67.6	70.5	67.6	-16.3	-16.2	-16.6	-16.6	-22.5	-22.6	-22.9	-22.9
Pressure	kg/cm ² (g)	21.72	21.72	21.72	21.72	22.04	22.04	22.04	22.04	22.02	22.02	22.02	22.02	21.54	21.54	21.54	21.54	21.56	21.56	21.56	21.56

Annexure-I

Stream Description		Condensate Stripper Upper Feed				Condensate Stripper Lower Feed				Condensate Stripper Bottom				Condensate Stripper Overhead			
Stream number		2061				4425				2415				2405			
Design Case		Case 1	Case 1A	Case 2	Case 2A	Case 1	Case 1A	Case 2	Case 2A	Case 1	Case 1A	Case 2	Case 2A	Case 1	Case 1A	Case 2	Case 2A
Component	Weight %																
Hydrogen		0.01	0.01	0.01	0.01	0	0	0	0	0	0	0	0	0.04	0.04	0.04	0.04
Carbon Monoxide		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbon Dioxide		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrogen Sulfide		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Methane		0.34	0.36	0.35	0.37	0	0	0	0	0	0	0	0	2.02	2.22	2.32	2.27
Acetylene		0.07	0.07	0.09	0.09	0	0	0	0	0	0	0	0	0.44	0.47	0.57	0.54
Ethylene		3.17	3.37	3.12	3.3	0	0	0	0	0	0	0	0	18.75	21.03	20.56	20.51
Ethane		2.15	2.29	1.98	2.1	0	0	0	0	0	0	0	0	12.74	14.30	13.06	13.04
Propadiene/Methylacetylene		0.54	0.57	0.56	0.59	10.10	8.59	10.85	9.48	2.68	2.25	2.62	2.26	1.63	1.40	1.59	1.48
Propylene		3.47	4.92	3.38	4.8	34.14	36.23	35.27	36.97	6.18	7.71	6.06	6.71	33.69	33.56	32.92	35.01
Propane		0.98	1.09	0.83	0.94	20.70	18.89	18.40	17.1	4.55	4.33	3.74	3.48	8.57	6.21	6.91	5.81
Butadiene/C4 Acetylene		4.42	4.87	4.69	5.16	13.57	14.07	14.77	15.2	6.54	6.94	6.76	7.19	4.96	4.82	5.28	5.27
Butylenes		3.59	4.06	3.31	3.75	15.69	16.23	15.23	15.65	6.26	6.65	5.65	6	5.13	5.05	4.81	4.85
Butanes		1.64	1.90	1.42	1.65	5.15	5.34	4.80	4.93	2.38	2.61	2.06	2.25	2.31	2.31	2.05	2.1
C5 Hydrocarbons		7.60	8.55	7.63	8.56	0.59	0.59	0.63	0.61	6.56	7.53	6.71	7.72	3.42	3.35	3.48	3.49
C6 Non Aromatics		6.60	6.38	5.33	5.16	0.01	0.01	0.01	0.01	5.87	5.77	4.82	4.79	1.03	0.86	0.84	0.73
C7 Non Aromatics		2.07	1.92	1.63	1.51	0	0	0	0	1.87	1.76	1.49	1.43	0.12	0.1	0.1	0.08
C8 Non Aromatics		0.67	0.62	0.51	0.47	0	0	0	0	0.61	0.57	0.47	0.45	0.02	0.01	0.01	0.01
Benzene		36.10	34.15	40.58	38.41	0.03	0.03	0.04	0.03	32.41	31.07	37.02	35.94	3.82	3.22	4.17	3.67
Toluene		16.67	15.47	17.25	16.07	0	0	0	0	15.14	14.21	15.88	15.18	0.65	0.52	0.65	0.55
Xylene/Ethylbenzene		4.05	3.79	3.31	3.14	0	0	0	0	3.69	3.49	3.06	2.97	0.07	0.05	0.05	0.04
Styrene		3.22	3.04	2.55	2.45	0	0	0	0	2.93	2.80	2.36	2.32	0.05	0.04	0.03	0.03
C9 - 204 C		2.55	2.50	1.38	1.37	0	0	0	0	2.33	2.30	1.28	1.3	0.02	0.01	0.01	0.01
204 - 288 C (PGO)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
288 C Plus (PFO)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Steam/Water		0.09	0.09	0.1	0.09	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.52	0.44	0.54	0.47
Nitrogen		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Naphtha		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL STREAM																	
Mass Flow	kg/h	4940	5351	5620	6079	1300	1300	1300	1300	5405	5795	6067	6399	835	856	853	980
Molar Flow	kg mol/hr	72.0	80.0	82.1	91	28.1	28.0	28.1	28	78	84.6	87.2	93	22.2	23.3	23.1	27
Molecular Weight		68.66	66.94	68.43	66.81	46.26	46.41	46.22	46.34	69.45	68.50	69.59	69.18	37.58	36.69	36.99	36.95
Temperature	°C	29.1	27.2	29.8	27.9	18.0	18.0	18.0	18	82.8	79.8	85.0	84.2	49.1	44.3	48.4	45.7
Pressure	kg/cm² (g)	9.61	9.61	9.61	9.61	19.12	19.12	19.12	19.12	9.85	9.85	9.85	9.85	9.61	9.61	9.61	9.61

Annexure-I

**Design Data
Condensate Stripper**

Pressure, kg/cm²g					
Overhead		9.61			
Bottoms		9.85			
	CASE 1	CASE 1A	CASE 2	CASE 2A	
Temperature, °C					
Feed	29.1	27.2	29.8	27.9	
C3/C4 Recycle from Depropanizer	17.9	17.9	17.9	17.9	
Bottoms	82.8	79.8	85	84.2	
Overhead	49.1	44.3	48.4	45.7	
Reboiler Inlet	64.3	62.6	65.4	65.3	
Reboiler Outlet	82.8	79.8	85	84.2	
Flow, kg/h					
Feed	4,940	5,351	5,620	6,079	
C3/C4 Recycle from Depropanizer	1,300	1,300	1,300	1,300	
Bottoms	5,405	5,795	6,067	6,399	
Overhead	835	856	853	980	
Reboiler Circulation	7,590	7,930	8,157	8,970	
Water Draw-off	0	0	0	0	

Annexure-I

**Design Data
Depropanizers**

	Depropanizer No.1	Depropanizer No.2
Pressure, kg/cm²g		
Top	16.17	6.38
Bottom	16.55	6.56
Feed from Depropanizer No.2	16.75	---
Reflux Drum	16.1	6.3

	CASE 1	CASE 1A	CASE 2	CASE 2A
Temperature, °C				
Depropanizer No.1 overhead	43.6	43.3	43.5	43.2
Depropanizer No.1 bottom	82	82	82	82
Depropanizer No.1 Reflux	42.5	42.2	42.4	42.1
Depropanizer No.1 Reboiler Inlet	77.5	77.6	77.4	77.6
Depropanizer No.1 Reboiler Outlet	82	82	82	82
Depropanizer No.1 Reflux Drum (VV-410)	41.2	40.9	41.1	40.8
Depropanizer No.2 overhead	32	32.3	32.2	32.4
Depropanizer No.2 bottom	79.6	79.6	81.3	81.3
Depropanizer No.2 Reflux	18	18	18	18
Depropanizer No.2 Reboiler Inlet	74.3	74.4	75.5	75.6
Depropanizer No.2 Reboiler Outlet	79.6	79.6	81.3	81.3
Depropanizer No.2 Reflux Drum	18	18	18	18
Flows, kg/h				
Depropanizer No.1 net overhead	9,984	12,474	9,786	12,274
Depropanizer No.1 bottom product	8,716	8,425	8,776	8,414
Depropanizer No.1 Reflux	14,446	17,082	14,123	16,764
Depropanizer No.2 net overhead product (C3/C4 Recycle to Cond Stripper)	1,300	1,300	1,300	1,300
Depropanizer No.2 bottom product	9,927	9,962	10,563	10,604
Depropanizer No.2 Reflux	5,156	4,759	5,294	5,006

Annexure-I

Stream Description		Depropanizer 1 Feed				Depropanizer 1 Overhead				Depropanizer 1 Bottom				Depropanizer 1 feed from Depro-2			
Stream number		4016				4401				4410				4418			
Design Case		Case 1	Case 1A	Case 2	Case 2A	Case 1	Case 1A	Case 2	Case 2A	Case 1	Case 1A	Case 2	Case 2A	Case 1	Case 1A	Case 2	Case 2A
Component	Weight %																
Hydrogen		0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
Carbon Monoxide		0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
Carbon Dioxide		0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
Hydrogen Sulfide		0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
Methane		0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
Acetylene		0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
Ethylene		0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
Ethane		0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
Propadiene/Methylacetylene		3.63	3.17	3.80	3.32	5.78	4.63	6.13	4.9	3.31	2.91	3.59	3.14	10.10	8.59	10.85	9.48
Propylene		48.75	55.91	49.32	56.55	76.08	80.22	77.60	81.5	12.60	13.00	13.01	13.39	34.14	36.23	35.27	36.97
Propane		11.58	10.47	10.27	9.36	18.09	15.10	16.22	13.56	7.14	6.57	6.39	5.91	20.70	18.89	18.40	17.1
Butadiene/C4 Acetylene		11.76	10.14	12.87	11.05	0.02	0.02	0.02	0.03	25.80	26.50	27.84	28.57	13.57	14.07	14.77	15.2
Butylenes		12.58	10.88	12.15	10.48	0.01	0.01	0.01	0.01	28.00	28.85	26.73	27.53	15.69	16.23	15.23	15.65
Butanes		5.53	4.77	5.07	4.36	0	0	0	0	11.74	12.04	10.63	10.92	5.15	5.34	4.80	4.93
C5 Hydrocarbons		4.41	3.44	4.66	3.61	0	0	0	0	8.19	7.53	8.49	7.83	0.59	0.59	0.63	0.61
C6 Non Aromatics		0.36	0.22	0.3	0.19	0	0	0	0	0.65	0.48	0.54	0.4	0.01	0.01	0.01	0.01
C7 Non Aomatics		0.01	0	0.01	0	0	0	0	0	0.01	0.01	0.01	0.01	0	0	0	0
C8 Non Aromatics		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Benzene		1.36	0.95	1.50	1.05	0	0	0	0	2.47	2.04	2.68	2.23	0.03	0.03	0.04	0.03
Toluene		0.04	0.03	0.04	0.03	0	0	0	0	0.07	0.06	0.07	0.06	0	0	0	0
Xylene/Ethylbenzene		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Styrene		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C9 - 204 C		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204 - 288 C (PGO)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
288 C Plus (PFO)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Steam/Water		0	0	0	0	0	0	0.01	0	0	0	0	0	0.01	0.02	0.02	0.02
Nitrogen		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Naphtha		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL STREAM																	
Mass Flow	kg/h	15807	17941	15582	17779	24430	29556	23908	29038	8716	8425	8776	8414	2894	2958	2980	2909
Molar Flow	kg mol/hr	337.2	390	332	386	577.4	699	566	687	164	159	165.0	158	63	64	64	63
Molecular Weight		46.87	46.02	46.92	46.03	42.31	42.28	42.26	42.24	53.22	53.14	53.18	53.1	46.26	46.41	46.22	46.34
Temperature	°C	57.8	54.9	57.9	55	43.6	43.3	43.5	43.2	82.0	82.0	82.0	82	62.9	62.8	62.8	62.9
Pressure	kg/cm² (g)	16.43	16.43	16.43	16.43	16.17	16.17	16.17	16.17	16.55	16.55	16.55	16.55	16.75	16.75	16.75	16.75

Stream Description		Depropanizer 2 Feed from Depro 1				Depropanizer 2 Feed from Cond Stripper Bottom				Depropanizer 2 Bottom				Depropanizer 2 Over head			
Stream number		4412				2417				4423				4413			
Design Case		Case 1	Case 1A	Case 2	Case 2A	Case 1	Case 1A	Case 2	Case 2A	Case 1	Case 1A	Case 2	Case 2A	Case 1	Case 1A	Case 2	Case 2A
Component	Weight %																
Hydrogen		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
Carbon Monoxide		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
Carbon Dioxide		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
Hydrogen Sulfide		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
Methane		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
Acetylene		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
Ethylene		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
Ethane		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
Propadiene/Methylacetylene		3.31	2.91	3.59	3.14	2.68	2.25	2.62	2.26	0.1	0.1	0.09	0.09	10.10	8.59	10.85	9.48
Propylene		12.60	13.00	13.01	13.39	6.18	7.71	6.06	6.71	0	0	0	0	34.14	36.23	35.27	36.97
Propane		7.14	6.57	6.39	5.91	4.55	4.33	3.74	3.48	0	0	0	0	20.70	18.89	18.40	17.1
Butadiene/C4 Acetylene		25.80	26.50	27.84	28.57	6.54	6.94	6.76	7.19	20.48	20.44	21.04	20.98	13.57	14.07	14.77	15.2
Butylenes		28.00	28.85	26.73	27.53	6.26	6.65	5.65	6	21.37	21.34	19.30	19.25	15.69	16.23	15.23	15.65
Butanes		11.74	12.04	10.63	10.92	2.38	2.61	2.06	2.25	9.43	9.42	8.07	8.06	5.15	5.34	4.80	4.93
C5 Hydrocarbons		8.19	7.53	8.49	7.83	6.56	7.53	6.71	7.72	10.52	10.51	10.66	10.63	0.59	0.59	0.63	0.61
C6 Non Aromatics		0.65	0.48	0.54	0.4	5.87	5.77	4.82	4.79	3.76	3.76	3.22	3.21	0.01	0.01	0.01	0.01
C7 Non Aomatics		0.01	0.01	0.01	0.01	1.87	1.76	1.49	1.43	1.03	1.03	0.87	0.87	0	0	0	0
C8 Non Aromatics		0	0	0	0	0.61	0.57	0.47	0.45	0.33	0.33	0.27	0.27	0	0	0	0
Benzene		2.47	2.04	2.68	2.23	32.41	31.07	37.02	35.94	19.80	19.78	23.47	23.45	0.03	0.03	0.04	0.03
Toluene		0.07	0.06	0.07	0.06	15.14	14.21	15.88	15.18	8.30	8.30	9.17	9.21	0	0	0	0
Xylene/Ethylbenzene		0	0	0	0	3.69	3.49	3.06	2.97	2.01	2.03	1.76	1.79	0	0	0	0
Styrene		0	0	0	0	2.93	2.80	2.36	2.32	1.59	1.62	1.35	1.4	0	0	0	0
C9 - 204 C		0	0	0	0	2.33	2.30	1.28	1.3	1.27	1.35	0.74	0.79	0	0	0	0
204 - 288 C (PGO)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
288 C Plus (PFO)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Steam/Water		0	0	0	0	0.01	0.01	0.01	0.01	0	0	0	0	0.01	0.02	0.02	0.02
Nitrogen		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Naphtha		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL STREAM																	
Mass Flow	kg/h	8716	8425	8776	8414	5405	5795	6067	6399	9927	9962	10563	10604	9349	9017	9574	9215
Molar Flow	kg mol/hr	164	159	165	158	78	85	87.2	93	151	151	160	160	202.1	194	207	199
Molecular Weight		53.22	53.14	53.18	53.1	69.45	68.50	69.59	69.18	65.75	65.80	66.17	66.23	46.26	46.41	46.22	46.34
Temperature	°C	42.3	42.3	42.3	42.3	40.0	40.0	40.0	40	79.6	79.6	81.3	81.3	32.0	32.3	32.2	32.4
Pressure	kg/cm² (g)	6.39	6.39	6.39	6.39	6.40	6.40	6.40	6.4	6.56	6.56	6.56	6.56	6.38	6.38	6.38	6.38

EXISTING POLYMER INHIBITOR DOZING PACKAGE**Equipment List**

Tag No.	Description
113-VV-435X	Polymerization Inhibitor Drum
113-PA-435AX/BX	Polymerization Inhibitor Pumps

Equipment consists of a process type drum and 2 diaphragm type multihead pumps consisting of four (4) pump heads.

Drum

Item No.	113-VV-435X	
Service	Polymerization Inhibitor Drum	
Type	Vertical process vessel	
Dimensions	Diameter (ID)	800 mm
	Height (T/T)	2300 mm
Material:	Carbon steel	
Corrosion Allowance:	3.0 mm	
Operating Temperature :	Ambient	
Operating Pressure:	0.3 kg/cm ² g (1.5 kg/cm ² g max.)	
Design Temperature:	65 °C (Note 4)	
Design Pressure :	3.5 kg/cm ² g. & 0.18 kg/cm ² ext.	
PSV back pressure (Max.):	1.7 kg/cm ² g	

Pumps

Item No.	113-PA-435AX/BX	
Service	Polymerization Inhibitor Pumps	
Type	Diaphragm type with multicylinder, four (4) head, pumps with common motor. Each cylinder to be individually adjustable and equipped with internal or external relief valve. Normally one pump is in operation and the other is in standby.	

Head	Destination	Capacity, liter/hr			Discharge Pressure (Rated)
		Min	Normal	Max	Kg/cm ² g
A	Depropanizer No.2 Feed	0.23	0.49	0.98	9.2
B	Deethanizer Feed.	1.01	2.15	4.30	24.8
C	Depropanizer No.1 Feed	0.43	1.00	2.00	18.7
D	Condensate Stripper Feed	0.14	0.34	0.68	12.3

Fluid Property

Density	899 kg/m ³ @ 15°C
Viscosity	0.9 cP @ 15°C