

Heat Exchanger Specification Sheet

1	Altagas								
2	15 MMSCFD Gas Plant <i>15 mmscfd ease</i>								
3	E-100 Gas/Gas Exchanger								
4	:								
5	Date:	Rev No.:	Job No.:						
6	Size	11--360	in	Type	NEN	hor	Connected in	1 parallel	2 series
7	Surf/unit(eff.)	3112	ft ²	Shells/unit	2	Surf/shell (eff.)		1556	ft ²
8	PERFORMANCE OF ONE UNIT								
9	Fluid allocation	Shell Side			Tube Side				
10	Fluid name	Dry Gas			Wet Gas				
11	Fluid quantity, Total	30780			33740				
12	Vapor (In/Out)	30780			30780		32593		31756
13	Liquid						1147		1984
14	Noncondensable								
15									
16	Temperature (In/Out)	2.21			111.38		123.4		31.04
17	Dew / Bubble point						123.4		
18	Density	2.312			1.654		2.215		37.6
19	Viscosity	0.011			0.013		0.011		6.32
20	Molecular wt, Vap						19.28		19.28
21	Molecular wt, NC								
22	Specific heat	BTU/(lb F)			0.569		0.555		0.5639
23	Thermal conductivity	BTU/(ft h F)			0.017		0.021		0.018
24	Latent heat	BTU/lb					538.2		118.2
25	Pressure	psi			504.7		514.7		
26	Velocity	ft/s			10.31		34.69		
27	Pressure drop, allow./calc.	psi			10		12.664		10
28	Fouling resist. (min)	ft ² h F/BTU			0.001		0.001		
29	Heat exchanged	1888734	BTU/h			MTD corrected		18.8	°F
30	Transfer rate, Service	32.29	Dirty		41.23	Clean		52.44	BTU/(h ft ² F)
31	CONSTRUCTION OF ONE SHELL							Sketch	
32		Shell Side			Tube Side				
33	Design/Test pressure	psi	1415/	/Code		1415/	/Code		
34	Design temperature	°F	150			150			
35	Number passes per shell		1			1			
36	Corrosion allowance	in	0.0625			0.0625			
37	Connections	In	6/ 600 ANSI			6/600 ANSI			
38	Size/rating	Out	6/ 600 ANSI			6/600 ANSI			
39		in/	Intermediate			/ 600 ANSI			
40	Tube No. 104	OD 0.75	Tks-avg	0.083	in	Length	30	ft	Pitch 0.9375
41	Tube type	Finned tube	19/in	Material	CS	Tube pattern	30		
42	Shell	CS	ID	OD 12.75	in	Shell cover			
43	Channel or bonnet	CS				Channel cover			
44	Tubesheet-stationary	CS				Tubesheet-floating			
45	Floating head cover				Impingement protection				
46	Baffle-crossing	CS	Type	single seg	Cut(%d)	35	vert Spacing: c/c	16	in
47	Baffle-long	Seal type					Inlet	11.875	
48	Supports-tube	U-bend			Type				
49	Bypass seal	Tube-tubesheet joint			groove/expand				
50	Expansion joint	Type							
51	RhoV2-Inlet nozzle	821	Bundle entrance	790		Bundle exit	1105		lb/(ft s ²)
52	Gaskets - Shell side	Tube Side							
53	Floating head								
54	Code requirements	ASME Code Sec VIII Div 1				TEMA class			
55	Weight/Shell	6182.3	Filled with water	7393.5		Bundle	2319.8		lb
56	Remarks								
57									
58									

