



Ariel Performance



Company: Ariel Corporation

Customer: Confidential

Quote:

Inquiry:

7.7.8.0

Case 4:

Project: Acid Gas Treater & Injection Proposal

Compressor Data:

Elevation,ft:	2800.00	Barmtr,psia:	13.251	Ambient,F:	110.00
Frame: (ELP)	KBK/4	Stroke, in:	6.00	Rod Dia, in:	2.000
Max RL Tot, lbf:	92000	Max RL Tens, lbf:	46000	Max RL Comp, lbf:	50000
Rated RPM:	1200	Rated BHP:	3680.0	Rated PS FPM:	1200.0
Calc RPM:	891.0	BHP:	904	Calc PS FPM:	891.0

Driver Data:

Type:	Electric
Mfg:	
Model:	60 Hz - 8 Po
BHP:	0
Avail:	0

SOUR GAS-2

Services

Gas Model

Service 1

VMG-APRNL2

Stage Data:

	1	2	3	4
Target Flow, MMSCFD	3.180	3.180	3.180	3.180
Flow Calc, MMSCFD	3.498	3.495	3.444	3.424
BHP per Stage	301.1	213.2	205.0	167.1
Specific Gravity	1.2724	1.2731	1.2826	1.2863
Ratio of Sp Ht (N)	1.3007	1.3052	1.3200	1.3531
Comp Suct (Zs)	0.9912	0.9742	0.9349	0.8278
Comp Disch (Zd)	0.9867	0.9656	0.9170	0.8050
Pres Suct Line, psig	<u>6.00</u>	N/A	N/A	N/A
Pres Suct Flg, psig	5.81	54.78	156.19	407.57
Pres Disch Flg, psig	56.32	160.35	415.08	1010.13
Pres Disch Line, psig	N/A	N/A	N/A	1000.00
Pres Ratio F/F	3.650	2.552	2.528	2.432
Temp Suct, F	80.00	120.00	120.00	120.00
Temp Clr Disch, F	120.00	120.00	120.00	120.00

Cylinder Data:

	Throw 1	Throw 2	Throw 4	Throw 3
Cyl Model	24-1/8K:20	12-1/2K:21	8-3/8K:20	5-3/8K:20
Cyl Bore, in	24.125	12.500	7.875	5.000
Cyl RDP (API), psig	250.0	727.3	1722.7	2286.4
Cyl MAWP, psig	275.0	800.0	1895.0	2515.0
Cyl Action	DBL	DBL	DBL	DBL
Cyl Disp, CFM	2818.7	749.6	291.7	111.8
Pres Suct Intl, psig	3.64	50.27	143.57	384.70
Temp Suct Intl, F	97	128	126	125
Pres Disch Intl, psig	62.14	169.99	445.57	1059.90
Temp Disch Intl, F	327	293	301	299
HE Suct Gas Vel, FPM	7901	6202	6538	5498
HE Disch Gas Vel, FPM	6706	5334	6010	4867
HE Spcrs Used/Max	0/0	0/4	0/4	0/2
HE Vol Pkt Avail	0.75+50.51	No Pkt	No Pkt	No Pkt
Vol Pkt Used	0.00 (V) %	No Pkt	No Pkt	No Pkt
HE Min Clr, %	14.21	17.31	17.99	20.84
HE Total Clr, %	14.96	17.31	17.99	20.84
CE Suct Gas Vel, FPM	7846	6043	6116	4618
CE Disch Gas Vel, FPM	6660	5198	5623	4088
CE Spcrs Used/Max	0/0	0/4	0/4	0/2
CE Min Clr, %	14.53	18.38	20.47	31.16
CE Total Clr, %	14.53	18.38	20.47	31.16
Suct Vol Eff HE/CE, %	68.1/68.8	76.6/75.4	75.5/72.8	73.5/62.9
Disch Event HE/CE, ms	10.3/12.3	13.1/15.2	13.1/15.0	13.1/14.2
Suct Pseudo-Q HE/CE	7.9/7.8	5.9/5.6	8.2/7.2	6.1/4.3
Gas Rod Ld Comp, %	53.5 C	29.7 C	30.4 C	29.1 C
Gas Rod Ld Tens, %	57.7 T	30.7 T	28.8 T	21.4 T
Gas Rod Ld Total, %	57.9	31.5	31.0	26.6
Xhd Pin Deg/%RvrsI lbf	138/95.0	171/96.1	180/84.6	158/77.7
Flow Calc, MMSCFD	3.498	3.495	3.444	3.424
Cyl BHP	301.1	213.2	205.0	167.1