



Ariel Performance



Company:

Customer:

Quote:

Inquiry:

7.7.7.2

Case 6:

Load Step 0

Project:

Targa Ethane

Compressor Data:

Elevation,ft:	69.00	Barmtr,psia:	14.659	Ambient,F:	100.00
Frame: (ELP)	KBZ/4	Stroke, in:	6.75	Rod Dia, in:	2.875
Max RL Tot, lbf:	150000	Max RL Tens, lbf:	75000	Max RL Comp, lbf:	80000
Rated RPM:	1000	Rated BHP:	5200.0	Rated PS FPM:	1125.0
Calc RPM:	890.0	BHP:	1893	Calc PS FPM:	1001.3

Driver Data:

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

Services

Service 1

Gas Model

VMG-APRNL2

Stage Data:

1

	1	2
Target Flow, MMSCFD	7.010	7.010
Flow Calc, MMSCFD	31.323	31.323
BHP per Stage	965.3	887.0
Specific Gravity	1.0470	1.0470
Ratio of Sp Ht (N)	1.2421	1.2117
Comp Suct (Zs)	0.7741	0.7845
Comp Disch (Zd)	0.7262	0.7542
Pres Suct Line, psig	385.50	N/A
Pres Suct Flg, psig	373.50	621.22
Pres Disch Flg, psig	631.22	1079.33
Pres Disch Line, psig	N/A	1068.50
Pres Ratio F/F	1.664	1.720
Temp Suct, F	100.00	193.98
Temp Clr Disch, F	N/A	120.00

Cylinder Data:

Throw 1

Throw 3

Throw 2

Throw 4

	Throw 1	Throw 3	Throw 2	Throw 4
Cyl Model	<u>13-5/8ZMU</u>	<u>13-5/8ZMU</u>	9-3/4ZM	9-3/4ZM
Cyl Bore, in	13.625	13.625	9.750	9.750
Cyl RDP (API), psig	986.4	986.4	1545.5	1545.5
Cyl MAWP, psig	1085.0	1085.0	1700.0	1700.0
Cyl Action	<u>CE(HEVU)</u>	<u>CE(HEVU)</u>	DBL	DBL
Cyl Disp, CFM	484.3	484.3	496.6	496.6
Pres Suct Intl, psig	357.57	357.57	607.85	607.85
Temp Suct Intl, F	122	122	197	197
Pres Disch Intl, psig	664.83	664.83	1110.12	1110.12
Temp Disch Intl, F	194	194	268	268
HE Suct Gas Vel, FPM	4779	4779	3770	3770
HE Disch Gas Vel, FPM	N/A	N/A	3754	3754
HE Spcrs Used/Max	N/A	N/A	0/0	0/0
HE Vol Pkt Avail	N/A	N/A	0.33+68.73	0.33+68.73
Vol Pkt Used	N/A %	N/A %	100.00 (V) %	100.00 (V) %
HE Min Clr, %	N/A	N/A	35.88	35.88
HE Total Clr, %	N/A	N/A	104.93	104.93
CE Suct Gas Vel, FPM	4713	4713	3443	3443
CE Disch Gas Vel, FPM	4543	4543	3427	3427
CE Spcrs Used/Max	0/4	0/4	0/0	0/0
CE Min Clr, %	38.40	38.40	40.37	40.37
CE Total Clr, %	38.40	38.40	40.37	40.37
Suct Vol Eff HE/CE, %	N/A/73.6	N/A/73.6	30.7/71.1	30.7/71.1
Disch Event HE/CE, ms	N/A/17.6	N/A/17.6	9.2/16.9	9.2/16.9
Suct Pseudo-Q HE/CE	N/A/5.1	N/A/5.1	1.8/1.7	1.8/1.7
Gas Rod Ld Comp, %	10.3 C	10.3 C	52.0 C	52.0 C
Gas Rod Ld Tens, %	54.1 T	54.1 T	40.3 T	40.3 T
Gas Rod Ld Total, %	32.5	32.5	47.8	47.8
Xhd Pin Deg/%RvrsI lbf	136/62.7	136/62.6	164/46.2	164/46.1
Flow Calc, MMSCFD	15.661	15.661	15.661	15.661
Cyl BHP	482.6	482.6	443.5	443.5