



Ariel Performance

Company: Ariel Corporation
Quote: This curve is for informational purposes only.

Customer: Crusader

Inquiry:



7.7.3.0

Case 1:

Project: CES1733

Compressor Data:

Elevation, ft:	2500.00	Barmtr, psia:	13.400	Ambient, °F:	100.00
Frame:	JGJ/2	Stroke, in:	3.50	Rod Dia, in:	1.500
Max RL Tot, lbf:	42000	Max RL Tens, lbf:	21000	Max RL Comp, lbf:	23000
Rated RPM:	1800	Rated BHP:	620.0	Rated PS FPM:	1050.0
Calc RPM:	1800.0	BHP:	440	Calc PS FPM:	1050.0

Driver Data:

Type:	Nat. Gas
Mfg:	Waukesha
Model:	H24GL
BHP:	530
Avail:	530

Services

Service 1

Gas Model

VMG

Stage Data:

1 (SG)

2

Target Flow, MMSCFD	0.000	0.000
Flow Calc, MMSCFD	2.734	2.734
BHP per Stage	226.2	207.6
Specific Gravity	0.6500	0.6504
Ratio of Sp Ht (N)	1.2469	1.2454
Comp Suct (Zs)	0.9903	0.9752
Comp Disch (Zd)	0.9863	0.9693
Pres Suct Line, psig	35.00	N/A
Pres Suct Flg, psig	34.52	143.66
Pres Disch Flg, psig	148.37	510.00
Pres Disch Line, psig	N/A	500.00
Pres Ratio F/F	3.376	3.332
Temp Suct, °F	80.00	120.00
Temp Clr Disch, °F	120.00	120.00

Cylinder Data:

Throw 2

Throw 1

Cyl Model	13-1/2RJ	8-3/8RJ
Cyl Bore, in	13.500	8.000
Cyl RDP (API), psig	272.7	577.3
Cyl MAWP, psig	300.0	635.0
Cyl Action	DBL	DBL
Cyl Disp, CFM	1037.3	360.1
Pres Suct Intl, psig	28.20	135.58
Temp Suct Intl, °F	89	126
Pres Disch Intl, psig	169.28	537.71
Temp Disch Intl, °F	276	299
HE Suct Gas Vel, FPM	11857	7684
HE Disch Gas Vel, FPM	11302	7364
HE Spcrs Used/Max	0/2	0/2
HE Vol Pkt Avail	1.31+58.27	1.18+61.30
Vol Pkt Used	0.00 (V) %	0.00 (V) %
HE Min Clr, %	20.07	22.61
HE Total Clr, %	21.37	23.79
CE Suct Gas Vel, FPM	11711	7413
CE Disch Gas Vel, FPM	11163	7105
CE Spcrs Used/Max	0/2	0/2
CE Min Clr, %	20.92	24.09
CE Total Clr, %	20.92	24.09
Suct Vol Eff HE/CE, %	57.4/58.1	53.9/53.4
Disch Event HE/CE, ms	4.8/5.6	4.6/5.4
Suct Pseudo-Q HE/CE	7.3/7.1	5.4/5.1
Gas Rod Ld Comp, lbf	20269 C	20488 C
Gas Rod Ld Tens, lbf	19871 T	19229 T
Gas Rod Ld Total, lbf	40140	39717
Xhd Pin Deg/%RvrsI lbf	172/97.2	162/91.9
Flow Calc, MMSCFD	2.734	2.734
Cyl BHP	226.2	207.6