



# 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:	502	Calc PS FPM:	1050.0

## Driver Data:

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

## Services

Gas Model

## Service 1

VMG

## Stage Data:

### 1 (SG)

### 2

Target Flow, MMSCFD	0.000	0.000
Flow Calc, MMSCFD	3.632	3.632
BHP per Stage	274.7	221.7
Specific Gravity	0.6500	0.6501
Ratio of Sp Ht (N)	1.2499	1.2494
Comp Suct (Zs)	0.9885	0.9737
Comp Disch (Zd)	0.9843	0.9682
Pres Suct Line, psig	45.00	N/A
Pres Suct Flg, psig	44.42	156.06
Pres Disch Flg, psig	160.83	433.77
Pres Disch Line, psig	N/A	425.00
Pres Ratio F/F	3.014	2.639
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	36.77	147.30
Temp Suct Intl, °F	89	125
Pres Disch Intl, psig	183.86	458.54
Temp Disch Intl, °F	261	266
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, %	63.1/63.8	66.2/65.8
Disch Event HE/CE, ms	5.3/6.1	5.8/6.7
Suct Pseudo-Q HE/CE	7.3/7.1	5.4/5.1
Gas Rod Ld Comp, lbf	21145 C	15933 C
Gas Rod Ld Tens, lbf	20703 T	14807 T
Gas Rod Ld Total, lbf	41848	30740
Xhd Pin Deg/%RvrsI lbf	170/96.0	175/99.2
Flow Calc, MMSCFD	3.632	3.632
Cyl BHP	274.7	221.7