



# 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:	495	Calc PS FPM:	1050.0

## Driver Data:

Type:	Nat. Gas
Mfg:	Waukesha
Model:	H24GL
BHP:	530
Avail:	500 (30)

## Services

## Service 1

Gas Model

VMG

## Stage Data:

## 1 (SG)

## 2

Target Flow, MMSCFD	0.000	0.000
Flow Calc, MMSCFD	4.073	4.073
BHP per Stage	286.8	202.5
Specific Gravity	0.6500	0.6501
Ratio of Sp Ht (N)	1.2508	1.2509
Comp Suct (Zs)	0.9876	0.9739
Comp Disch (Zd)	0.9834	0.9691
Pres Suct Line, psig	50.00	N/A
Pres Suct Flg, psig	49.37	155.78
Pres Disch Flg, psig	160.31	357.27
Pres Disch Line, psig	N/A	350.00
Pres Ratio F/F	2.768	2.191
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	41.05	147.03
Temp Suct Intl, °F	88	124
Pres Disch Intl, psig	183.67	378.56
Temp Disch Intl, °F	249	239
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	5.00 (V) %	0.00 (V) %
HE Min Clr, %	20.07	22.61
HE Total Clr, %	24.29	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, %	63.4/67.6	74.3/74.0
Disch Event HE/CE, ms	5.6/6.6	6.8/7.7
Suct Pseudo-Q HE/CE	7.3/7.2	5.5/5.1
Gas Rod Ld Comp, lbf	20512 C	11921 C
Gas Rod Ld Tens, lbf	20065 T	10948 T
Gas Rod Ld Total, lbf	40577	22869
Xhd Pin Deg/%RvrsI lbf	174/90.7	169/93.1
Flow Calc, MMSCFD	4.073	4.073
Cyl BHP	286.8	202.5