



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:	234	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	1.500	1.500
Flow Calc, MMSCFD	1.812	1.812
BHP per Stage	114.8	113.5
Specific Gravity	0.6500	0.6499
Ratio of Sp Ht (N)	1.2661	1.2671
Comp Suct (Zs)	0.9682	0.9365
Comp Disch (Zd)	0.9605	0.9397
Pres Suct Line, psig	145.00	N/A
Pres Suct Flg, psig	143.42	426.81
Pres Disch Flg, psig	435.54	1212.13
Pres Disch Line, psig	N/A	1200.00
Pres Ratio F/F	2.863	2.784
Temp Suct, °F	70.00	120.00
Temp Clr Disch, °F	120.00	120.00

Cylinder Data:

Throw 2

Throw 1

Cyl Model	5-1/2RJ	3-7/8RJ
Cyl Bore, in	5.500	3.625
Cyl RDP (API), psig	1568.2	2000.0
Cyl MAWP, psig	1725.0	2200.0
Cyl Action	DBL	DBL
Cyl Disp, CFM	166.8	68.8
Pres Suct Intl, psig	130.41	402.62
Temp Suct Intl, °F	75	124
Pres Disch Intl, psig	467.45	1270.18
Temp Disch Intl, °F	229	281
HE Suct Gas Vel, FPM	9467	8312
HE Disch Gas Vel, FPM	8260	7257
HE Spcrs Used/Max	0/2	0/0
HE Vol Pkt Avail	1.17+52.89	0.95+54.36
Vol Pkt Used	0.00 (V) %	0.00 (V) %
HE Min Clr, %	16.52	20.82
HE Total Clr, %	17.69	21.77
CE Suct Gas Vel, FPM	8762	6889
CE Disch Gas Vel, FPM	7646	6014
CE Spcrs Used/Max	0/2	0/0
CE Min Clr, %	19.12	27.87
CE Total Clr, %	19.12	27.87
Suct Vol Eff HE/CE, %	70.7/68.8	67.2/59.7
Disch Event HE/CE, ms	5.8/6.6	5.7/6.2
Suct Pseudo-Q HE/CE	7.7/6.6	5.5/3.8
Gas Rod Ld Comp, lbf	8272 C	9736 C
Gas Rod Ld Tens, lbf	7152 T	6664 T
Gas Rod Ld Total, lbf	15424	16400
Xhd Pin Deg/%RvrsI lbf	169/96.6	160/85.4
Flow Calc, MMSCFD	1.812	1.812
Cyl BHP	114.8	113.5