



Company: Ariel Corporation
 Quote:
 Case 1:

Ariel Performance

Customer:
 Inquiry:
 Project: trailer mounted unit



7.7.9.0

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:	<u>407</u>	Calc PS FPM:	1050.0

Driver Data:

Type:	Nat. Gas
Mfg:	Caterpillar
Model:	G3406 TA
BHP:	276
Avail:	276

Services

Gas Model

Service 1

VMG-APRNL2

Stage Data:

1 (SG)

2

Target Flow, MMSCFD	5.000	5.000
Flow Calc, MMSCFD	2.461	2.461
BHP per Stage	190.9	209.8
Specific Gravity	0.6500	0.6499
Ratio of Sp Ht (N)	1.2530	1.2528
Comp Suct (Zs)	0.9825	0.9552
Comp Disch (Zd)	0.9756	0.9542
Pres Suct Line, psig	70.00	N/A
Pres Suct Flg, psig	69.17	277.72
Pres Disch Flg, psig	283.79	1111.13
Pres Disch Line, psig	N/A	1100.00
Pres Ratio F/F	3.599	3.863
Temp Suct, F	70.00	120.00
Temp Clr Disch, F	120.00	120.00

Cylinder Data:

Throw 2

Throw 1

Cyl Model	9-3/4RJ	5-1/2RJ
Cyl Bore, in	9.750	5.500
Cyl RDP (API), psig	577.3	1568.2
Cyl MAWP, psig	635.0	1725.0
Cyl Action	DBL	DBL
Cyl Disp, CFM	538.0	166.8
Pres Suct Intl, psig	62.70	259.18
Temp Suct Intl, F	77	126
Pres Disch Intl, psig	304.59	1165.89
Temp Disch Intl, F	257	328
HE Suct Gas Vel, FPM	9058	8630
HE Disch Gas Vel, FPM	8215	7286
HE Spcrs Used/Max	0/2	0/2
HE Vol Pkt Avail	1.11+51.77	1.17+52.89
Vol Pkt Used	0.00 (V) %	0.00 (V) %
HE Min Clr, %	18.94	17.10
HE Total Clr, %	20.05	18.26
CE Suct Gas Vel, FPM	8843	7988
CE Disch Gas Vel, FPM	8020	6744
CE Spcrs Used/Max	0/2	0/2
CE Min Clr, %	19.84	19.74
CE Total Clr, %	19.84	19.74
Suct Vol Eff HE/CE, %	56.5/56.8	56.5/53.6
Disch Event HE/CE, ms	4.6/5.4	4.4/5.1
Suct Pseudo-Q HE/CE	8.1/7.7	4.9/4.2
Gas Rod Ld Comp, lbf	18196 C	22067 C
Gas Rod Ld Tens, lbf	17497 T	19424 T
Gas Rod Ld Total, lbf	35693	41491
Xhd Pin Deg/%RvrsI lbf	142/92.7	149/77.3
Flow Calc, MMSCFD	2.461	2.461
Cyl BHP	190.9	209.8