



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:	199	Calc PS FPM:	1050.0

Driver Data:

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

Disch Temp

Services

Gas Model

Service 1

VMG-APRNL2

Stage Data:

1 (SG)

2

Target Flow, MMSCFD	5.000	5.000
Flow Calc, MMSCFD	0.982	0.982
BHP per Stage	88.3	104.7
Specific Gravity	0.6500	0.6498
Ratio of Sp Ht (N)	1.2799	1.2732
Comp Suct (Zs)	0.9943	0.9833
Comp Disch (Zd)	0.9934	0.9888
Pres Suct Line, psig	25.00	N/A
Pres Suct Flg, psig	24.62	142.26
Pres Disch Flg, psig	147.26	760.00
Pres Disch Line, psig	N/A	750.00
Pres Ratio F/F	4.226	<u>4.969</u>
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	21.68	132.65
Temp Suct Intl, F	79	128
Pres Disch Intl, psig	157.64	793.73
Temp Disch Intl, F	302	389
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, %	49.5/49.9	44.1/40.4
Disch Event HE/CE, ms	4.1/4.7	3.6/4.0
Suct Pseudo-Q HE/CE	7.9/7.6	4.7/4.1
Gas Rod Ld Comp, lbf	10202 C	15985 C
Gas Rod Ld Tens, lbf	9859 T	14264 T
Gas Rod Ld Total, lbf	20061	30249
Xhd Pin Deg/%RvrsI lbf	157/77.2	144/94.2
Flow Calc, MMSCFD	0.982	0.982
Cyl BHP	88.3	104.7