



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:	210	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	1.293	1.293
BHP per Stage	99.4	104.7
Specific Gravity	0.6500	0.6501
Ratio of Sp Ht (N)	1.2492	1.2449
Comp Suct (Zs)	0.9910	0.9772
Comp Disch (Zd)	0.9870	0.9718
Pres Suct Line, psig	30.00	N/A
Pres Suct Flg, psig	29.57	133.66
Pres Disch Flg, psig	138.11	510.00
Pres Disch Line, psig	N/A	500.00
Pres Ratio F/F	3.526	3.559
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	26.23	124.49
Temp Suct Intl, F	77	126
Pres Disch Intl, psig	148.69	535.66
Temp Disch Intl, F	251	309
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, %	57.5/57.9	59.9/57.3
Disch Event HE/CE, ms	4.7/5.5	4.8/5.4
Suct Pseudo-Q HE/CE	8.0/7.6	4.8/4.1
Gas Rod Ld Comp, lbf	9202 C	10019 C
Gas Rod Ld Tens, lbf	8867 T	8795 T
Gas Rod Ld Total, lbf	18069	18814
Xhd Pin Deg/%Rvrs lbf	159/76.8	153/82.1
Flow Calc, MMSCFD	1.293	1.293
Cyl BHP	99.4	104.7