



Company: Ariel Corporation  
 Quote:  
 Case 1:

## Ariel Performance

Customer: Jay Compressor  
 Inquiry:  
 Project: Jay's Project



7.7.7.0

### Compressor Data:

Elevation,ft:	1250.00	Barmtr,psia:	14.035	Ambient,F:	100.00
Frame: <b>(ELP)</b>	KBT/4	Stroke, in:	5.00	Rod Dia, in:	2.000
Max RL Tot, lbf:	92000	Max RL Tens, lbf:	46000	Max RL Comp, lbf:	50000
Rated RPM:	1500	Rated BHP:	3680.0	Rated PS FPM:	1250.0
Calc RPM:	1400.0	BHP:	986	Calc PS FPM:	1166.7

### Driver Data:

Type:	Unselected
Mfg:	
Model:	
BHP:	0
Avail:	0

### Services

Gas Model

### Service 1

VMG-APRNL2

### Stage Data:

	<b>1 (SG)</b>	<b>2</b>	<b>3</b>
Target Flow, MMSCFD	5.000	5.000	5.000
Flow Calc, MMSCFD	5.035	5.036	5.005
BHP per Stage	385.5	315.7	266.0
Specific Gravity	0.6500	0.6498	0.6467
Ratio of Sp Ht (N)	1.2481	1.2520	1.2696
Comp Suct (Zs)	0.9874	0.9663	0.9168
Comp Disch (Zd)	0.9824	0.9609	0.9251
Pres Suct Line, psig	50.00	N/A	N/A
Pres Suct Flg, psig	49.36	205.24	563.07
Pres Disch Flg, psig	210.24	573.07	1414.14
Pres Disch Line, psig	N/A	N/A	1400.00
Pres Ratio F/F	3.538	2.677	2.475
Temp Suct, F	80.00	120.00	120.00
Temp Clr Disch, F	120.00	120.00	120.00

### Cylinder Data:

	<b>Throw 1</b>	<b>Throw 3</b>	<b>Throw 4</b>	<b>Throw 2</b>
Cyl Model	11T:21	11T:21	8-3/8T:20	5-3/8T:20
Cyl Bore, in	11.000	11.000	7.875	5.000
Cyl RDP (API), psig	1154.5	1154.5	1722.7	2286.4
Cyl MAWP, psig	1270.0	1270.0	1895.0	2515.0
Cyl Action	DBL	DBL	DBL	DBL
Cyl Disp, CFM	757.2	757.2	381.9	146.4
Pres Suct Intl, psig	45.07	45.07	191.49	538.61
Temp Suct Intl, F	88	88	125	124
Pres Disch Intl, psig	222.39	222.39	609.08	1468.99
Temp Disch Intl, F	261	261	272	261
HE Suct Gas Vel, FPM	8561	8561	8560	7199
HE Disch Gas Vel, FPM	7310	7310	7870	6372
HE Spcrs Used/Max	0/4	0/4	0/4	0/2
HE Vol Pkt Avail	0.83+47.77	0.83+47.77	No Pkt	No Pkt
Vol Pkt Used	0.00 (V) %	0.00 (V) %	No Pkt	No Pkt
HE Min Clr, %	20.32	20.32	21.59	25.01
HE Total Clr, %	21.14	21.14	21.59	25.01
CE Suct Gas Vel, FPM	8278	8278	8008	6047
CE Disch Gas Vel, FPM	7068	7068	7362	5353
CE Spcrs Used/Max	0/4	0/4	0/4	0/2
CE Min Clr, %	21.94	21.94	24.56	37.39
CE Total Clr, %	21.94	21.94	24.56	37.39
Suct Vol Eff HE/CE, %	55.6/54.2	55.6/54.2	68.0/64.2	67.9/54.7
Disch Event HE/CE, ms	6.0/6.8	6.0/6.8	7.5/8.5	7.9/8.0
Suct Pseudo-Q HE/CE	5.9/5.5	5.9/5.5	6.9/6.1	4.7/3.3
Gas Rod Ld Comp, %	34.0 C	34.0 C	42.0 C	40.1 C
Gas Rod Ld Tens, %	35.1 T	35.1 T	39.9 T	29.5 T
Gas Rod Ld Total, %	36.0	36.0	42.8	36.6
Xhd Pin Deg/%RvrsI lbf	157/71.0	157/71.0	153/82.2	145/84.2
Flow Calc, MMSCFD	2.518	2.518	5.036	5.005
Cyl BHP	192.7	192.7	315.7	266.0