



Company:
Quote:
Case 3:

Ariel Performance

Customer:
Inquiry:
Project:



7.7.16.0

Compressor Data:

Elevation,ft:	2000.00	Barmtr,psia:	13.651	Ambient,F:	100.00
Frame:	JGP/2	Stroke, in:	3.00	Rod Dia, in:	1.125
Max RL Tot, lbf:	12000	Max RL Tens, lbf:	6000	Max RL Comp, lbf:	7000
Rated RPM:	1800	Rated BHP:	170.0	Rated PS FPM:	900.0
Calc RPM:	1775.0	BHP:	95	Calc PS FPM:	887.5

Driver Data:

Type:	Electric
Mfg:	WEG
Model:	444T
BHP:	125
Avail:	125

Services

Gas Model

Service 1

VMG-APRNL2

Stage Data:

	1 (SG)	2	3	4
Target Flow, SCFM	129.697	129.697	129.697	129.697
Flow Calc, SCFM	186.950	186.950	184.436	183.889
BHP per Stage	24.1	20.7	22.8	21.4
Specific Gravity	0.6100	0.6097	0.5996	0.5995
Polytropic Exponent (N)	1.2550	1.2513	1.2822	1.5384
Comp Suct (Zs)	0.9940	0.9838	0.9529	0.8666
Comp Disch (Zd)	0.9918	0.9809	0.9603	1.0151
Pres Suct Line, psig	20.00	N/A	N/A	N/A
Pres Suct Flg, psig	20.00	107.50	348.85	1270.10
Pres Disch Flg, psig	110.94	356.65	1283.36	4545.59
Pres Disch Line, psig	N/A	N/A	N/A	4500.00
Pres Ratio F/F	3.702	3.056	3.578	3.551
Temp Suct, F	80.00	127.00	120.00	124.00
Temp Clr Disch, F	127.00	120.00	124.00	119.00

Cylinder Data:

	Throw 1	Throw 1	Throw 2	Throw 2
Cyl Model	8SP-HE	4-3/8SP-CE	3SG-CE	1-3/4SG-FS-HE
Cyl Bore, in	8.000	4.125	3.000	1.250
Cyl RDP (API), psig	400.0	850.0	2318.2	5545.5
Cyl MAWP, psig	440.0	935.0	2550.0	6100.0
Cyl Action	HE	CE	CE	HE
Cyl Disp, CFM	154.9	38.1	18.7	3.8
Pres Suct Intl, psig	16.57	97.60	341.14	1259.60
Pres Disch Intl, psig	122.60	392.91	1316.01	4590.33
Temp Disch Intl, F	280	299	321	322
HE Suct Gas Vel, FPM	10880	0	0	3018
HE Disch Gas Vel, FPM	9716	N/A	N/A	3369
HE Spcrs Used/Max	0/2	N/A	N/A	N/A
HE Vol Pkt Avail	1.31+59.76	N/A	N/A	No Pkt
Vol Pkt Used	0.00 (V) %	N/A %	N/A %	No Pkt
HE Min Clr, %	19.32	N/A	N/A	29.99
HE Total Clr, %	20.63	N/A	N/A	29.99
CE Suct Gas Vel, FPM	0	10100	5085	0
CE Disch Gas Vel, FPM	N/A	10100	5197	N/A
CE Spcrs Used/Max	N/A	0/2	N/A	N/A
CE Min Clr, %	N/A	19.05	29.45	N/A
CE Total Clr, %	N/A	19.05	29.45	N/A
Suct Vol Eff HE/CE, %	54.4/N/A	N/A/66.1	N/A/42.5	54.3/N/A
Disch Event HE/CE, ms	4.9/N/A	N/A/6.7	N/A/5.2	5.4/N/A
Suct Pseudo-Q HE/CE	9.4/N/A	N/A/7.5	N/A/2.5	1.3/N/A
Gas Rod Ld Comp, %	60.3 C	60.3 C	80.0 C	80.0 C
Gas Rod Ld Tens, %	79.4 T	79.4 T	73.5 T	73.5 T
Gas Rod Ld Total, %	74.9	74.9	83.4	83.4
Xhd Pin Deg/%Rvrsl lbf	164/60.9	164/60.9	126/61.0	126/61.0
Flow Calc, SCFM	186.950	186.950	184.436	183.889
Cyl BHP	24.1	20.7	22.8	21.4