

BAFCables.xls Rack Layout
Tentative Layout

BAF Vacuum controller locations				Vacuum Rack 5650	
Building 957				1	
Each circuit is single phase, 120 Vac, 20 A.				2	1
Rack is 19" wide and approx. 24" deep, and 44 U high.				3	Pump 1 IP_55
Each rack has 750 CFM exhaust fan.				4	Pump 2 IP_91
Spacing between controllers is 2U (3.5") min.				5	
Filter panel is 7" minimum.				6	1
Current is rounded up and assumes 110 Vrms.				7	Pump 1 IP_130
Layout & power consumption is TENTATIVE				8	Pump 2 IP_184
pending final controller configuration.				9	
				10	1
				11	Pump 1 IP_205
				12	Pump 2 IP_228
				13	
Support Building Rack Summary				14	1
Rack	Device	Circuit	Circuit	15	Pump 1 IP_257
1	IPC	Emergency	2	16	Pump 2 IP_280
2	GC	UPS	1	17	
3	PLC	UPS	1	18	1
4	PC	Normal	1	19	Pump 1 spare
				20	Pump 2 spare
IPC	Ion pump controller			21	
GC	Gauge controller			22	
PLC/PC	PLC/PC/power supplies			23	
TMPC	TurboMolecular Pump station control			24	
				25	
				26	
				27	
				28	
Approximate Power Consumption and Losses				29	1.5 A included for 300 CFM blower
for Vacuum Controllers				30	
	Max.	Typ.		31	
Device	Power, W	Power, W	Heat, W	32	
IPC	500	150	100	33	
GC	45	25	10	34	
PLC/PC	350	250	75	35	
				36	
				37	
				38	IPC 5
				39	Power 2500
				40	Current 25

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Vacuum Rack 5651		Vacuum Rack 5652				Vacuum Rack 5653				
1		1				1				
2		2		1	1	1				
3		3	A1	CCG_55	A1	CCG_130	A1	CCG_205	3	
4		4	B1	CCG_91	B1	CCG_184	B1	CCG_228	4	
5		5	A2	TCG_55	A2	TCG_130	A2		5	
6	BAF Vacuum Control	6	B2		B2		B2	TCG_228	6	
7	PLC and PC	7							7	
8		8		1					8	
9		9	A1	CCG_257					9	
10		10	B1	CCG_280					10	TBD
11		11	A2						11	
12		12	B2	TCG_280					12	
13		13							13	
14		14							14	
15	Gate Valve Control	15							15	
16		16							16	
17	GV_54	17							17	
18	GV_90	18							18	
19	GV_185	19							19	
20	GV_256	20							20	
21		21							21	
22		22							22	
23		23							23	
24		24							24	
25		25							25	
26		26							26	
27		27							27	
28		28							28	
29		29							29	
30		30							30	
31		31							31	
32		32							32	
33		33							33	
34		34							34	
35		35							35	
36		36							36	
37		37							37	
38		38		GC				4	38	
39	Power < 350 W	39		Power				180	39	Power < 350 W
40	Current < 4 A @ 110 Vac	40		Current				2	40	Current < 4 A @ 110 Vac