

Oil Performance Data																						
PB-65-W-O-G (6-21-13 MSS)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
% Burner output		0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%
Heat input	MMBtu/hr	6,500,000	9,425,000	12,350,000	15,275,000	18,200,000	21,125,000	24,050,000	26,975,000	29,900,000	32,825,000	35,750,000	38,675,000	41,600,000	44,525,000	47,450,000	50,375,000	53,300,000	56,225,000	59,150,000	62,075,000	65,000,000
Oil Flow	GPM	0.8	1.1	1.4	1.8	2.1	2.5	2.8	3.2	3.5	3.9	4.2	4.5	4.9	5.2	5.6	5.9	6.3	6.6	6.9	7.3	7.6
Oil Modulating Valve Position		0.0	1.8	3.0	3.7	4.1	4.5	4.8	5.0	5.2	5.5	5.8	6.0	6.2	6.5	6.7	6.8	7.0	7.4	7.8	8.6	9.9
Oil Pressure at Train Inlet	PSI	110	110	110	109	109	109	109	108	107	106	105	104	103	102	100	100	100	100	100	100	100
Oil Pressure at Nozzle	PSI	29	32	34	37	40	42	44	46	49	51	52	55	56	59	62	63	65	66	68	70	71
Compressed air Pressure	PSI	60	60	61	61	62	62	62	63	63	64	65	65	66	66	67	67	68	68	69	70	70
Compressed air flow	SCFM	55	55	55	55	54	53	52	51	50	49	48	48	47	47	46	45	45	43	41	41	40
Biomass Feed Rate	Lbs/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Biomass Feeder Speed	RPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Biomass Feeder Motor Speed	Hz	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Burner Blower	SCFH	14,700	46,801	78,901	111,002	143,103	175,204	207,304	239,405	271,506	303,607	335,707	367,808	399,909	432,010	464,110	496,211	528,312	560,413	592,513	624,614	656,715
Blower Output	%	9.0	13.2	17.0	23.0	27.0	32.0	36.5	40.5	44.0	48.7	54.0	56.8	62.0	65.0	69.5	73.7	77.0	83.0	86.5	93.2	100.0
Blower Body Pressure	i.w.c.	0.4	0.7	0.9	1.3	1.7	2.0	2.4	2.8	3.1	3.7	4.3	4.7	5.3	5.8	6.5	7.0	7.6	8.3	9.2	9.7	10.4
Blower Speed	Hz	13.3	15.3	17.3	20.1	22.3	24.8	27.3	29.3	31.3	33.8	36.3	38.1	40.3	42.4	44.3	46.5	48.3	50.5	53.0	54.4	56.0
Blower Power	HP	0.7	0.9	1.1	1.5	2.1	2.6	3.5	4.1	4.9	6.2	7.5	8.8	10.2	11.9	13.5	15.5	17.2	19.6	22.4	24.2	26.4
Blower Current	A	17.1	17.2	17.3	17.4	17.8	18.0	18.5	19.0	19.4	20.3	21.1	21.9	22.9	23.9	25.1	26.3	27.3	28.9	30.8	31.9	33.4
Mill Exhaust Fan Flow	SCFH	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000
Total Air	SCFH	194,700	226,801	258,901	291,002	323,103	355,204	387,304	419,405	451,506	483,607	515,707	547,808	579,909	612,010	644,110	676,211	708,312	740,413	772,513	804,614	836,715
Flame Diameter	Feet	2.1	2.8	3.4	4.0	4.4	4.6	4.8	4.8	4.8	4.7	4.4	4.5	4.4	4.3	4.3	4.2	4.3	4.2	4.1	4.0	3.8
Flame Length	Feet	3.0	4.2	5.0	5.1	5.0	5.5	6.0	6.3	7.0	7.6	8.0	9.1	10.0	10.3	11.0	11.2	11.0	11.9	13.0	13.9	16.0
Excess air	%	214%	152%	120%	100%	86%	76%	69%	63%	58%	55%	51%	49%	46%	44%	42%	41%	39%	38%	37%	36%	35%