

Oil Performance Data												
PF-50-O-2012		1	2	3	4	5	6	7	8	9	10	11
% Burner output		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Heat input	MMBtu/hr	5.0	9.5	14.0	18.5	23.0	27.5	32.0	36.5	41.0	45.5	50.0
Oil Flow	GPM	0.6	1.1	1.6	2.2	2.7	3.2	3.8	4.3	4.8	5.3	5.9
Oil Control Valve Position	Indicator	0.00	1.75	4.00	5.00	5.25	6.00	6.25	6.50	7.25	8.25	9.25
Oil Pressure at Train Inlet	PSI	38.5	38.5	38	38	38	36	36	36	34	34	34
Oil Pressure at Nozzle	PSI	2	2	2	2	4	4	6	6.5	8	10	10.5
Total Air Flow	SCFH	396,440	415,008	498,109	589,892	610,373	651,324	665,991	675,188	695,958	715,189	718,147
Burner Air Flow	SCFH	109,181	127,749	210,850	302,633	323,114	364,065	378,732	387,929	408,699	427,930	430,888
Damper Position	Indicator	0.00	0.75	2.00	2.95	3.00	3.75	4.00	4.50	5.25	7.25	9.00
Blower Power	HP	26.5	28.5	37.5	48.5	50.5	54.0	55.5	56.0	57.5	58.5	58.7
Blower Current (480V)	A	30.5	32.0	40.0	50.0	52.0	55.5	57.0	57.5	58.5	59.5	60.5
Blower Body Pressure	i.w.c.	44.0	43.7	42.0	39.0	36.5	32.4	30.5	28.6	24.5	21.0	20.5
Burner Body Pressure	i.w.c.	0.3	0.85	3.5	6.1	7.3	7.4	8.2	9.4	11.8	14.1	15
Flame Diameter	Feet	2.0	2.5	3.0	3.0	3.0	4.0	4.5	4.5	5.0	5.0	5.0
Flame Length	Feet	2.0	2.0	3.5	3.5	3.5	4.5	4.5	4.5	5.0	5.0	5.0
Excess air (Calculated)	%	731%	358%	273%	234%	178%	148%	118%	94%	78%	65%	51%

Match oil flow rate (GPM) with burner body pressure. The chart below shows this graphically. To use it, find the fuel flow on the horizontal axis, then move vertically to the curve and then horizontally to the left to find the required burner body pressure. These values were measured using a burner firing into atmospheric conditions. These are to be used as a starting point only. Final Setup must be determined using a combustion analyzer.

