

Oil Performance Data												
PF-35-O		1	2	3	4	5	6	7	8	9	10	11
% Burner output		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1 Heat input	MMBtu/hr	3.5	6.6	9.8	12.9	16.1	19.2	22.4	25.5	28.7	31.8	35.0
2 Oil Flow	GPM	0.4	0.8	1.2	1.5	1.9	2.3	2.6	3.0	3.4	3.7	4.1
3	LPM	1.6	3.0	4.4	5.8	7.2	8.6	10.0	11.4	12.8	14.2	15.6
4 Oil Control Valve Position	Indicator	2.00	3.25	4.00	4.25	4.75	5.25	5.50	6.00	6.25	7.00	9.00
5 Oil Pressure at Train Inlet	PSI	50	50	48.5	48	48	48	48	46.5	46	46	44
6	kPa	344.7	344.7	334.4	330.9	330.9	330.9	330.9	320.6	317.2	317.2	303.4
7 Oil Pressure at Nozzle	PSI	3.5	4	6	7	10	13	15	19	23	26	30
8	kPa	24.1	27.6	41.4	48.3	68.9	89.6	103.4	131.0	158.6	179.3	206.8
9 Total Air Flow	SCFH	266,968	284,147	299,077	309,609	324,922	344,912	351,279	363,936	383,669	401,948	437,178
10	M ³	7,560	8,046	8,469	8,767	9,201	9,767	9,947	10,306	10,864	11,382	12,380
11 Burner Air Flow	SCFH	98,301	115,480	130,410	140,942	156,255	176,245	182,612	195,269	215,002	233,281	268,511
12	M ³	2,784	3,270	3,693	3,991	4,425	4,991	5,171	5,529	6,088	6,606	7,603
13 Damper Position	Indicator	0.00	1.50	2.25	2.50	3.25	3.75	4.00	4.50	5.00	5.75	9.00
14 Blower Power	HP	18.5	20.5	22.0	23.0	25.0	27.0	27.8	29.1	31.0	32.6	36.7
15 Blower Current (480V)	A	22.0	23.8	25.1	26.0	27.7	29.5	30.4	31.7	33.0	34.8	38.0
16 Blower Body Pressure	i.w.c.	31.7	32.4	33.1	33.3	33.5	33.5	33.5	33.5	33.2	32.9	32.3
17	Pa	7,896	8,070	8,245	8,294	8,344	8,344	8,344	8,344	8,270	8,195	8,045
18 Burner Body Pressure	i.w.c.	0.6	2.4	3.7	4.9	6.9	9.8	11.2	13.4	17.4	21.5	31.7
19	Pa	149	598	922	1,221	1,719	2,441	2,790	3,338	4,334	5,355	7,896
20 Flame Diameter	Feet	3	3	3	3	3	3.5	3.75	4	4	4.25	3.5
21 Flame Length	Feet	2.25	2.25	2.25	2.5	2.75	3.25	3.5	4.25	4.25	4.5	3.5
22 Excess air (Calculated)	%	700%	348%	220%	151%	112%	88%	64%	49%	40%	32%	31%

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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.

