

Oil Performance Data												
WJ-35-O-2017		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	6.8	9.8	13.0	16.0	19.1	22.2	25.3	28.3	31.4	34.5	38.4
Oil Flow	GPM	0.8	1.2	1.5	1.9	2.2	2.6	3.0	3.3	3.7	4.0	4.5
	LPM	3.0	4.4	5.8	7.1	8.5	9.9	11.2	12.6	14.0	15.3	17.1
Oil Control Valve Position	Indicator	1.75	3.75	4.5	4.8	5	5.75	6	6.25	7	9	11
Oil Pressure at Train Inlet	PSI	84.5	84	84	82.75	82.5	82	82	82	80	80	80
	kPa	583	579	579	571	569	565	565	565	552	552	552
Oil Pressure at Nozzle	PSI	36	38	42	44.5	46	50	52	54	58	60	62
	kPa	248	262	290	307	317	345	359	372	400	414	427
Compressed air Pressure	PSI	70	70	70	70	70	70	70	70	70	72	72
	kPa	483	483	483	483	483	483	483	483	483	496	496
Compressed Air Flow	SCFH	55.87	56.75	52.71	55.31	53.45	49.5	47.54	47.42	47.21	42.16	42.21
	M ³	1.58	1.61	1.49	1.57	1.51	1.40	1.35	1.34	1.34	1.19	1.20
Main Air Flow	SCFH	86,930	207,638	250,602	282,812	286,471	340,144	349,771	372,586	410,168	446,121	463,637
	M ³	2,462	5,880	7,096	8,008	8,112	9,632	9,904	10,550	11,615	12,633	13,129
Damper Position	Indicator	0.0	1.5	2.0	2.3	2.5	3.1	3.3	3.5	4.5	6.0	8.8
Blower Power	HP	18.5	26.2	28.5	30.1	30.2	32.7	33.1	33.7	35.6	36.2	36.5
Blower Current	A	22.6	29.3	31.3	32.9	33.1	35.3	35.9	36.5	38.1	38.7	39.0
Blower Body Pressure	i.w.c.	22.7	22.5	22.2	22.0	21.8	20.9	20.8	20.0	19.4	18.6	18.0
	Pa	5,654	5,604	5,530	5,480	5,430	5,206	5,181	4,982	4,832	4,633	4,483
Burner Body Pressure	i.w.c.	0.90	2.60	3.70	4.90	5.00	6.70	6.80	7.50	9.80	11.50	12.30
	Pa	224	648	922	1221	1245	1669	1694	1868	2441	2864	3064
Flame Diameter	Feet	2.0	2.0	2.3	2.7	2.8	3.2	3.1	3.1	3.8	3.9	3.9
Flame Length	Feet	2.5	2.33	3.5	3	2.87	3.5	3	3.87	4.25	4.08	4.25
Excess air (Calculated)	%	34%	122%	103%	85%	57%	61%	45%	38%	37%	36%	27%

16-252, single motor

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.

