

Oil Performance Data												
WJ-150-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%
Heat input	MMBtu/hr	16.5	31.4	46.2	61.1	75.9	90.8	105.6	120.5	135.3	150.2	165.0
Oil Flow	GPM	1.9	3.7	5.4	7.2	8.9	10.7	12.4	14.1	15.9	17.6	19.4
	LPM	7.3	13.9	20.5	27.1	33.7	40.3	46.9	53.5	60.1	66.7	73.3
Oil Control Valve Position	Indicator	0.00	1.00	1.50	1.75	2.50	2.75	3.50	4.75	5.75	7.00	10.00
Oil Pressure at Train Inlet	PSI	145	140	135	130	122	120	115	110	105	100	100
	kPa	1,000	965	931	896	841	827	793	758	724	689	689
Oil Pressure at Nozzle	PSI	36	42	46	50	56	60	64	68	72	78	80
	kPa	248	290	317	345	386	414	441	469	496	538	552
Compressed air Pressure	PSI	70	72	72	72	74	74	76	76	78	78	80
	kPa	483	496	496	496	510	510	524	524	538	538	552
Compressed Air Flow rate	SCFM	130	124	124	120	110	110	100	96	90	90	90
	M ³	3.68	3.51	3.51	3.40	3.11	3.11	2.83	2.72	2.55	2.55	2.55
Main Air Flow	SCFH	387,330	693,003	799,212	815,704	1,028,099	1,042,679	1,328,680	1,624,169	1,813,606	1,913,623	2,014,642
	M ³	10,968	19,624	22,631	23,098	29,113	29,525	37,624	45,991	51,356	54,188	57,048
Damper Position	Indicator	0.00	1.40	1.80	2.00	2.70	2.75	3.75	4.75	5.75	6.75	9.00
Blower Power	HP	84	98.4	106	106	116	118	133	148	156	158	160
Blower Current	A	110.0	125.0	130.0	131.0	141.0	143.0	157.0	173.0	181.0	184.0	186.0
Blower Body Pressure	i.w.c.	23.8	24.3	24.6	24.7	24.9	24.9	24.6	23.6	22.7	21.4	19.9
	Pa	5,928	6,053	6,127	6,152	6,202	6,202	6,127	5,878	5,654	5,330	4,957
Burner Body Pressure	i.w.c.	0.10	1.30	2.00	2.20	3.40	3.80	6.60	11.00	13.90	16.10	16.90
	Pa	25	324	498	548	847	947	1,644	2,740	3,462	4,010	4,209
Flame Diameter	Feet	2.25	3.25	3.50	4.50	4.75	5.25	6.00	5.50	6.00	6.50	6.50
Flame Length	Feet	7.75	10.50	12.50	13.50	12.00	12.50	10.50	9.50	7.50	7.75	8.50
Excess air (Calculated)	%	146%	132%	81%	40%	42%	20%	32%	41%	41%	34%	28%

271343 BG Europa

60F

Hauck K-1-29 Oil control valve, All data was collected as the firing rate was decreasing. One mod motor used.

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.

