

SELF PROPORTIONING BURNERS



WESMAN COMBUSTION EQUIPMENT

SCHIELDROP



WESMAN SELF-PROPORTIONING OIL AND OIL/GAS BURNERS

are low air pressure burners that can efficiently burn any grade of fuel oil, and can be easily modified for combustion of gas as well.

SIMPLICITY OF PIPELINES

Air enters the burner through a single inlet and is divided into atomizing and combustion air inside the burner. The single air inlet makes the air pipe system simple to install.

SIMPLICITY OF CONTROL

Air and oil control valves are mechanically linked and operated through a single lever. Once air/oil ratio is initially set, it is automatically maintained constantly throughout its entire 5:1 turndown range, reducing dependence on operator skill.

PROPER ATOMIZATION

Air control through reduction of areas by cones within cones ensures constant air velocities at any point within the burner's turndown, providing constant atomizing air pressure at the point of oil atomization at all times. The burner thus does not suffer from loss of atomization at lower turndown.

COMBUSTION SPECIFICATIONS

Oil viscosity at burner should not exceed 100 sec Redwood 1, and oil pressure should be constant between 5 to 15 psig. Minimum air pressure at burner is 25 to 28 inch w.g. for light distillate oil and 35 to 45 inch w.g. for residual oil. For oil with calorific value 9900 Kcal per liter, 400 scfh of air is needed per liter of oil burned per hour. For burner mounting details and operating instructions, please ask for separate bulletin.

- Single lever for simultaneous air and oil control
- Wide range of capacity with turndown 5 to 1
- Constant air to fuel ratio at all times
- Quick removal of internal parts for cleaning
- Only one air connection per burner
- Easy to install and maintain

Can be converted to combination oil and gas burner with no changes to oil and air pipelines. Requires gas with calorific value above 4000 Kcal/Nm³ and constant pressure between 50 to 150 mm.



WESMAN SELF-PROPORTIONING BURNER SIZES AND OIL FIRING CAPACITIES

BURNER AIR PRESSURE	635 MM (25") WG		762 MM (30") WG		890 MM (35") WG		1016 MM (40") WG	
	MAX LPH	MIN LPH	MAX LPH	MIN LPH	MAX LPH	MIN LPH	MAX LPH	MIN LPH
1**	5.58	0.82	6.36	0.91	6.9	0.95	7.35	1.04
2	8.17	1.82	9.08	1.82	9.53	1.82	10.4	2.27
3	14.5	3.18	15.9	3.18	17.3	3.63	18.2	3.63
3A	22.7	4.54	25.0	5.0	26.8	5.45	28.6	5.9
4	30.4	6.36	34.1	6.81	36.3	7.26	38.6	7.72
4A	50.0	10.0	54.5	10.9	59.0	11.8	63.6	12.7
5	63.6	12.7	68.1	13.6	72.6	14.5	77.2	15.4
5A	93.5	18.6	102.1	20.4	110.3	21.8	117.6	23.6

** SUITABLE FOR LIGHT OIL ONLY

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