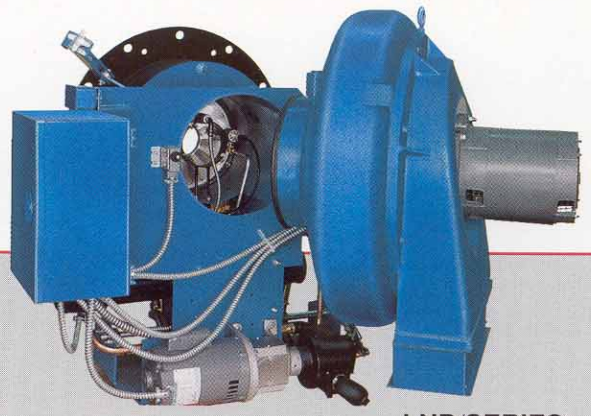
LN/SERIES

LOW NO_x Flue Gas Recirculation

INDUSTRIAL COMBUSTION

Brochure 36

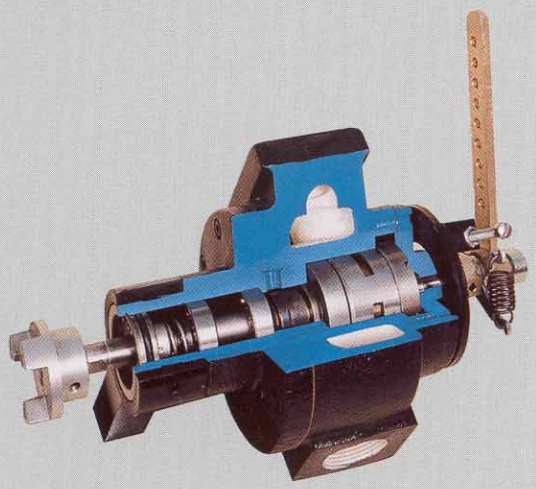
LNM/SERIES

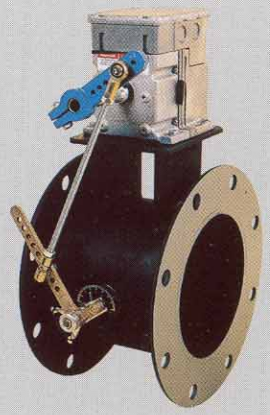


LND/SERIES

SWING AWAY AIR HOUSING

The hinged air housing provides easy access to the nozzle, scanner, pilot and diffuser for inspection or removal. No disconnection of fuel or power lines is required.





PRECISE OIL METERING

The positive displacement piston type oil metering unit is an outstanding design feature on all Industrial Combustion air atomizing burners. This unit precisely meters oil volume and is not affected by changes in oil temperature or viscosity. Accurate and reliable at all firing rates, the oil metering unit is mounted on the burner and is driven by a separate motor.

F.G.R. SHUTOFF VALVE

The F.G.R. shutoff valve is designed to prevent combustible gases from returning to the combustion zone during pre and post purge. A modutrol motor opens and closes the valve and proof of closure is provided by an auxiliary switch in the modutrol motor. The valve is equipped with ANSI flanges, to allow easy connection to the F.G.R. piping.

CAM TRIM

Cam trim is a standard feature on all LN Series burners.

This feature makes it possible to adjust the burner for consistent and precise fuel/air ratios throughout the firing range. Excess air is controlled to a minimum through the 14 point adjustment range.

The Flue Gas Recirculation control valve is also driven by the fuel/air modutrol motor. This provides easy adjustment to insure the proper amount of F.G.R. is metered into the combustion zone for maximum NO_X reduction, throughout the burner firing range. Linkage settings are positive by utilizing heavy duty components, and direct connections to the drive motor.

Meets California Standards of less than 30 ppm NOx and less than 50 ppm CO

THE STATE OF CALIFORNIA a decade ago took steps to improve its air quality standards.

Industrial Combustion, the first to meet the strict emissions criteria set by the South Coast Air Quality Management District, designed and developed a Flue Gas Recirculation system which has proven to be the benchmark in the industry, firing up to 1500 HP boilers.

With over 500 units in the field nationwide, our commitment to engineering excellence and the environment has not changed.

Air pollution reduction, fuel savings and reliability, make Industrial Combustion an outstanding choice....for the end user, and the air we breathe.

COMBUSTION AIR

COMBUSTION FLUE GAS

RECIRCULATED FLUE GAS

TYPICAL LOW NO_x INSTALLATION

LNDEG 145P Firing a Kewanee L3S 300 HP Boiler

INDUSTRIAL COMBUSTION

Capacities and Specifications

LND SERIES

Burner Size	42P	54P	63P	84S	84P	105P	145S	145P	175	210	252	300
Oil Input (U.S. gph)	24	30	38	45	53	60	75	90	105	120	150	180
Gas Input (Btu/hr. 000)	3,360	4,200	5,250	6,300	7,350	8,400	10,500	12,600	14,700	16,800	21,000	25,200
Boiler Horsepower	80	100	125	150	175	200	250	300	350	400	500	600
Impeller Motor Horsepower	3	5	5	5	7.5	10	15	15	20	25	30	40
Compressor Module Horsepower	3	3	3	3	3	3	3	3	5	5	5	7 1/2
Metering Unit Horsepower	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.75	0.75	0.75

LND SERIES

Burner Size	315	336	378	420
Oil Input (U.S. gph)	215	225	240	270
Gas Input (Btu/hr. 000)	29,400	31,500	33,600	37,800
Boiler Horsepower	700	750	800	900
Impeller Motor Horsepower	60	60	60	60
Compressor Module Horsepower	7.5	7.5	15	15
Metering Unit Horsepower	0.75	0.75	1	1

LNM SERIES

Burner Size	14	16	19	22	25	28	30	34P	42P	54P	63P
Oil Input (U.S. gph)	8.6	10.0	10.5	13.6	15	16.8	18	21	24	30	37.5
Gas Input (Btu/hr. 000)	1,200	1,400	1,470	1,900	2,100	2,350	2,520	2,940	3,360	4,200	5,250
Boiler Horsepower	29	30	35	45	50	56	60	70	80	100	125
Impeller Motor Horsepower	1/2	1/2	1/2	1/2	2	2	2	2	2	3	3
Air/Oil Metering Unit Horsepower	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1	1	2

Notes:

1/ Firing rates based on altitudes to 2000 ft. above sea level. For firing rates at higher altitudes, consult factory. Gas input based on 1000 Btu/cu. ft. and .60 specific gravity, oil input based on 140,000 Btu/gal.

2/ Boiler overall efficiency of 80% estimated. Industrial Combustion does not guarantee overall boiler efficiency.

3/ Furnace pressure, furnace dimensions and required NO_X emissions may allow higher firing rates than shown above, consult factory.

Factory Authorized Sales and Service

Type of fuel determines the model designation.

MODEL	FUEL
LNDG	GAS
LNDL	NO. 2 OIL
LNDLG	GAS/NO. 2 OIL
LNDM	NO. 2 – 5 OIL
LNDMG	GAS/NO. 2 – 5 OIL
LNDE	NO. 2 – 6 OIL
LNDEG	GAS/NO. 2 – 6 OIL
LNMG	GAS
LNMM	NO. 2 – 5 OIL
LNMMG	GAS/NO. 2 – 5 OIL
LNME	NO. 2 – 6 OIL
LNMEG	GAS/NO. 2 – 6 OIL

INDUSTRIAL COMBUSTION
MULTI FUEL BURNERS
351-21st Street - Monroe, Wisconsin 53566-2798