

**SUPERIOR  
DESIGN FOR  
MAXIMUM  
EFFICIENCY**



# Superior Technology

Industrial Combustion, a division of Aqua-Chem, Inc., is a leading manufacturer of burners designed for commercial, industrial, and institutional applications. The history of our product line is a long and enviable one. For nearly 70 years, our burners have been part of virtually every major boiler manufacturer's packaged products.

Superior design is the key to our products' ongoing popularity. Industrial Combustion was the first company to introduce air-atomizing systems to burner designs. Since then, Industrial Combustion has led the industry in the development of new burner technologies. Our commitment to research and development assures Industrial Customers of having the most technologically advanced burner systems available.

Today, our wide range of products has enabled Industrial Combustion to become a leader in both domestic and international markets. Industrial Combustion burners are still standard equipment in virtually every leading boiler manufacturer. We are also the burner-of-choice when upgrading existing boiler installations for maximum fuel efficiency.



## The Perfect Balance

All Industrial Combustion burners feature true forced draft design for superior control of the air/fuel mixture. This perfect balance of air and fuel results in complete combustion and maximum efficiency. All Industrial Combustion Burners are designed to work efficiently with all kinds of fuel. Our low-emissions burners meet or exceed the California emissions standards and all other clean air regulations.

## A Burner for Every Application

Industrial Combustion's product line offers a wide choice of burner capacities from 500,000 Btu/hour to 63,000,000 Btu/hour. Units provide superior performance in boiler, heater, furnace, kiln, and drier applications. All units are designed to perform to maximum efficiency with either gas or oil. Combination units afford operators the option of choosing the lower cost fuel without costly equipment changeover or adjustments.

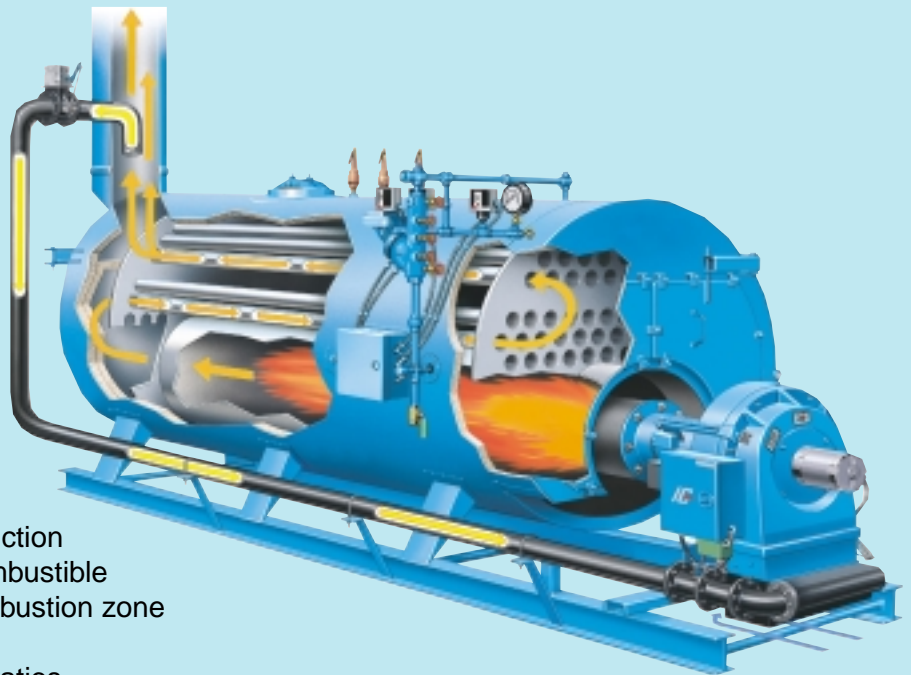
# Low Emission

## LN-SERIES Low NOx Flue Gas Recirculation Burner System

The L/N Series burners are designed to meet the ever more stringent State of California emission standards. Industrial Combustion was the first to meet these strict standards. We at Industrial Combustion will continue to develop lower emission units in advance of the lower emission standards that are set for the future.

### Features Include:

- Flue Gas Recirculation control valve insures proper metering of F.G.R for maximum NOx reduction
- FGR Shutoff Valve prevents combustible gases from returning to the combustion zone
- FGR damper assembly
- Cam trim for consistent air/fuel ratios
- Hinged air housing for easy access/servicing
- < 30 PPM Design
- < 20 PPM Design
- < 12 PPM Design



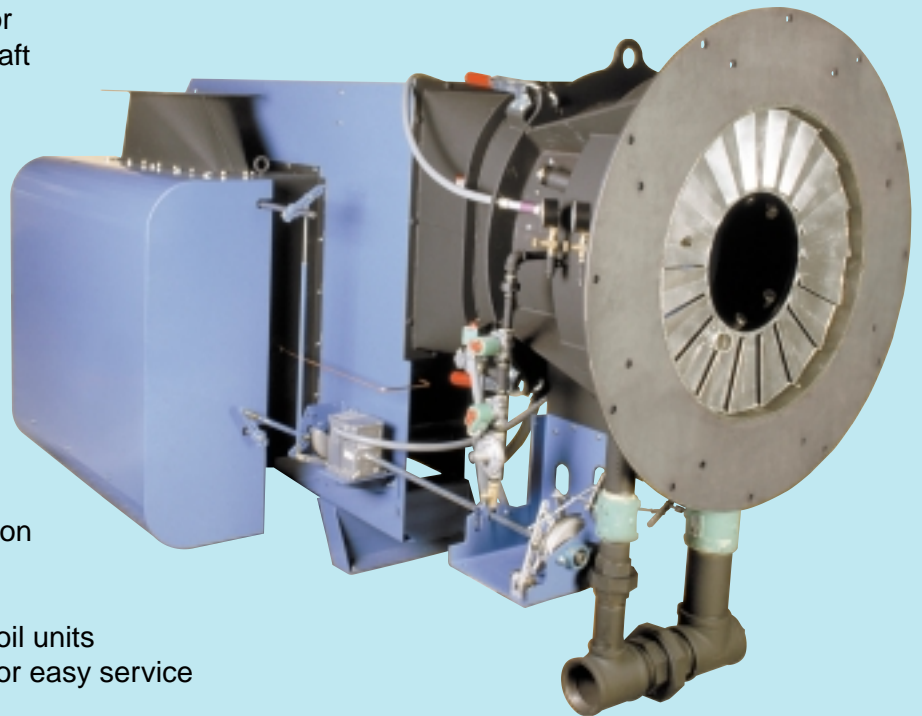
# Commercial, Industrial, and

## SERIES 1

The Series 1 burners are designed for large boilers applications. A forced draft design is able to handle the high furnace pressures, multi-fuels, and is also available as a low NOx <30 ppm with F.G.R.

### Features Include:

- Dual gas manifold
- Cam trim for consistent fuel/air ratios
- High turndown ratios
- 14 points adjustment range
- Air or steam atomizing
- Top or bottom F.G.R. connection
- Backward-curved aluminum impeller
- Gas manifold standard on all oil units
- Hinged swing-away housing for easy service



### Specifications

Fuels:	Gas, oil, or combination gas/oil
Btu/hour:	46,200,000 to 63,000,000
kW:	13,537 to 18,459
USGPH:	330 to 450
kg/h:	1,142 to 1,557
Thermal Output:	1,100 to 1,500 BHP
kW:	10,791 to 14,715

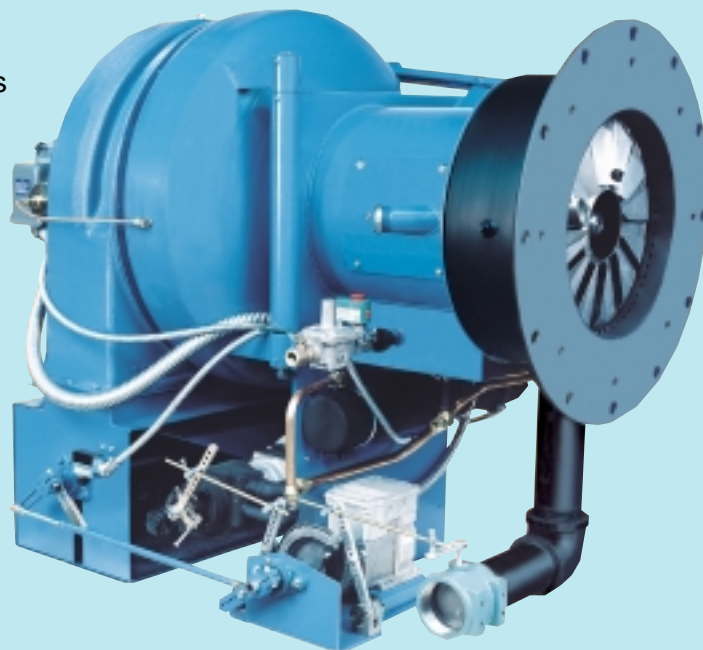
# D Institutional Applications

## D-SERIES HEV-E-DUTY FORCED DRAFT DUAL FUEL BURNERS

The D-Series gas, oil, and combination gas/oil burners are a forced draft packaged burner system. Known for its trouble-free operation and efficient performance, the D-Series Burners are ideal for a wide range of applications. U/L and cU/L listed.

### Design Features Include:

- Low-pressure air atomizing system on oil with rotary vane compressor
- Piston-type positive displacement oil metering system
- Cam trim for consistent air/fuel ratios
- 14-point adjustment range
- Nozzle line electric heater standard on medium to heavy oil burners
- Hinged air housing for easy access/servicing
- Gas manifold on oil burners for upgrade to combination units
- Backward-curved impeller provides adequate combustion air for various furnace pressures and high-altitude applications
- Rotary damper system with silencer
- Refractory combustion cone
- Full modulation and high turndown ratios



### Specifications

Fuels:	Gas, light to heavy oils, or combination gas/oil
Btu/hour:	4,200,000 to 42,000,000
kW:	1231 to 12306
USGPH:	30 to 300 – Oil
kg/h:	104 to 1038
Thermal Output:	100 to 1000 BHP
kW:	981 to 9810

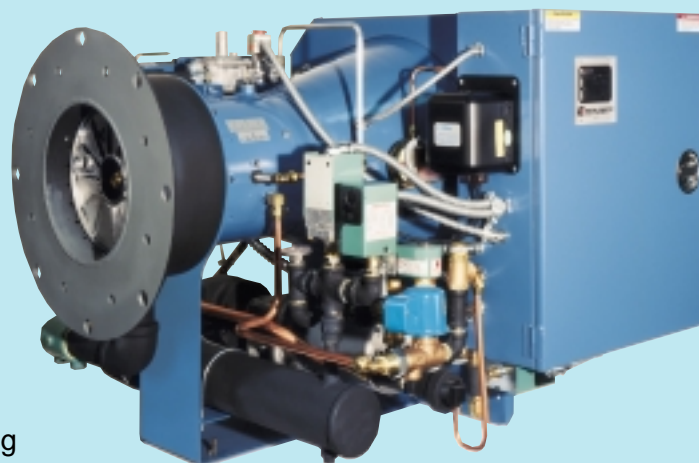
# Forced Draft Dual Fuel Burner

## M-SERIES FORCED DRAFT DUAL FUEL BURNERS

The M-Series Burners include gas, oil, and gas/oil combinations from 1,400,000 Btu/h to 10,500,000 Btu/h. These U/L and cU/L listed units are designed for a wide range of applications including boilers, heaters, furnaces, kilns, and dryers.

### Design Features Include:

- Low-pressure air atomizing system on oil with rotary vane compressor
- Piston-type positive displacement oil metering pump
- Cam trim for consistent air/fuel ratios
- 14-point adjustment range M34-63
- Nozzle line electric heater standard on medium to heavy oil burners
- Hinged air housing for easy access/servicing
- Gas manifold on oil burners for upgrade to combination units
- Backward-curved impeller provides adequate combustion air for various furnace pressures and high-altitude applications
- Multi-blade-type air damper systems with silencer
- Refractory combustion cone
- Full modulation and high turndown ratios



### Specifications

Fuels:	Gas, light to heavy oils, or combination gas/oil
Btu/hour:	1,400,000 to 10,500,000
kW:	410 to 3077
USGPH:	10 to 75 – Oil
kg/h:	35 to 260
Thermal Output:	30 to 250 BHP
kW:	294 to 2453

## H- AND K-SERIES FORCED DRAFT DUAL FUEL BURNERS

The H- and K- Series Burners are designed to operate on gas, oil, or a combination of fuels at capacities ranging from 1,260,000 to 12,500,000 Btu/H. The K-Series Burners are specially designed for Scotch Marine-type firetube boilers. The H-Series Burners are designed for cast iron firebox or watertube boilers. The design of these units feature low CO performance, a unique air damper for easy combustion set-up independent low and high fire adjustment.

U/L and cU/L listed.

### Additional Design Features Include:

- Pressure atomizing burner
- Gas manifold on oil burners for upgrade to combination units
- Backward-curved impeller with lifetime warranty
- Multi-blade-type air damper systems with silencer

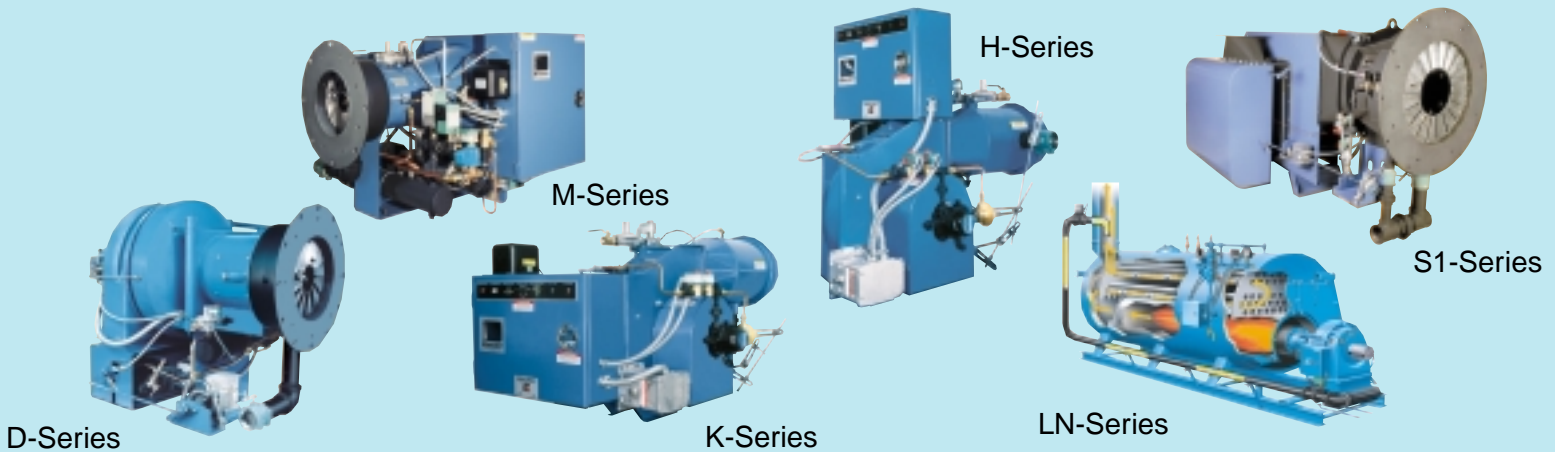


### Specifications

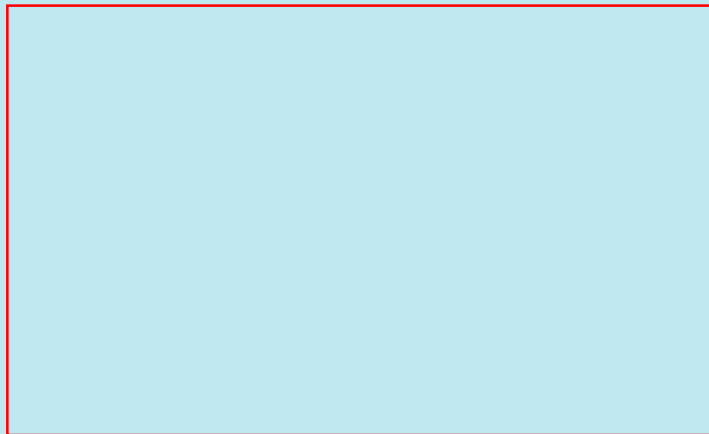
Fuels:	Gas, light to heavy oils, or combination gas/oil
Btu/hour:	1,000,000 to 12,500,000
kW:	369 to 3663
USGPH:	7 to 89 – Oil
kg/h:	24 to 308
Thermal Output:	24 to 300 BHP
kW:	235 to 2943

## Available Accessories

- Oil Pump and Heater Systems
- Simplex or Duplex
- 75 to 1600 GPH – No. 2 – 6 oil
- Packaged system – assembled, wired, tested, and mounted on welded drip pan steel base
- Draft systems
- Lead-lag systems
- Custom control panels
- Prepiped gas trains



Factory Authorized Sales and Service



**IC** INDUSTRIAL COMBUSTION  
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