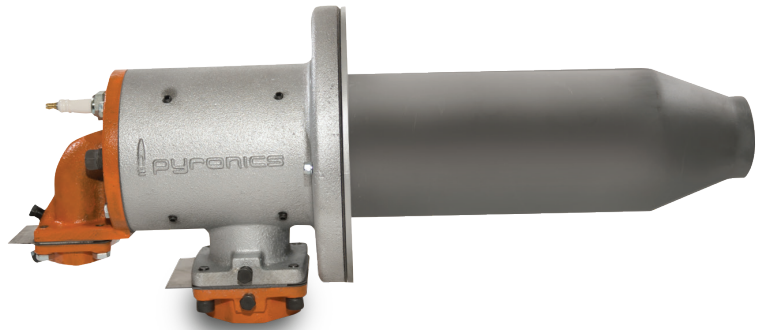


Capacity Range:
150,000 BTU/hr to 10 MM



Superflame™ Low NOx High Velocity Burner

The unique design of the Superflame's silicon carbide outer tube and alloy inner firing tube allows this burner to operate up to 2500°F (1371°C). Superflames utilize high exit velocity to enhance temperature uniformity. Ideal for various applications such as annealing furnaces, ceramic kilns, incinerators, and tundish preheaters. This burner incorporates two-stage combustion to provide low NOx. Exit velocities achieve 275fps (83mps) for medium velocity version and 400fps (122mps) for high velocity version.

How It Works

Superflame high velocity discharge circulates heat to furnace loads to create uniform temperatures. Featuring staged air combustion, the burner reduces production of NOx below conventional burners. Superflames are rated for ambient air or for preheated combustion air up to 700°F (371°C).

SiC firing tubes are sustainable,

lightweight, and self-supporting for easy mounting on brick or fiber wall furnaces. Alloy firing tubes are optimal for lower temperature applications. These low NOx burners work with ultraviolet detectors and flame rods. Direct spark permits flexibility in control system design.

Applications

- Annealing Furnaces
- Sintering Furnaces
- Rotary Forge Furnaces
- Tundish Preheaters
- Nonferrous Melting Furnaces
- Ceramic Kilns
- Incinerators
- Glass Day Tank



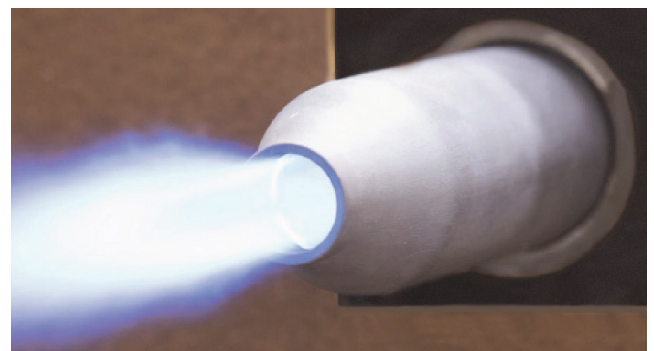
Diverse Combustion Technologies. One Reliable Source.

Operating Principles

- Nine (9) models in capacities ranging from 150,000 to 5,000,000 BTU/hr (HHV basis) or 40 to 2638 kW (LHV basis)
- Works with on-ratio or excess air operation
 - > High-low firing
 - > Modulating control
 - > Pulse-firing options
- Runs on gaseous fuels, including
 - > Natural gas
 - > Propane
 - > Clean manufactured gases
- On-board metering orifices for gas and air. Air orifice can be sized to compensate for preheated combustion air
- Operates at its nominal rating at less than 20" W.C. (62 mbar) whether the combustion air temperature is 60°F (15.5°C) or 700°F (371°C) by adjusting the size of the inlet air orifice
- Process temperatures up to 2500°F (1371°C)
- Preheated air temperature to 700°F (371°C)
- Burner incorporates two-stage combustion for low NOx

We offer 11 models in capacities ranging from 150,000 to 10,000,000 BTU/hr (kW_{LHV})

Superflame 150	150,000 (40) BTU/hr (kW)
Superflame 250	250,000 (66) BTU/hr (kW)
Superflame 500	500,000 (132) BTU/hr (kW)
Superflame 750	750,000 (198) BTU/hr (kW)
Superflame 1000	1,000,000 (264) BTU/hr (kW)
Superflame 1500	1,500,000 (396) BTU/hr (kW)
Superflame 2000	2,000,000 (528) BTU/hr (kW)
Superflame 3000	3,000,000 (791) BTU/hr (kW)
Superflame 5000	5,000,000 (1319) BTU/hr (kW)
Superflame 7500	7,500,000 (1978) BTU/hr (kW)
Superflame 10000	10,000,000 (2638) BTU/hr (kW)



Features	Benefits
Medium or High Velocity	Improves temperature uniformity
Up to 4000% excess air	Wide range of ratio operation; assists in oxidizer applications
Durable Silicon Carbide firing tube	Preheated air temperature to 700°F (371°C)
Flame Rod or Ultraviolet Flame Detection	Application flexibility
Alloy inner tube for staged air combustion	Low NOx formation
On-board metering orifices	Easy setup and adjustment



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