

# Selas Superflame™ Pak Burner



The Selas Superflame™ Pak burner is an innovative adaptation of Selas' proven High Momentum Ceramic Tube (HMCT) low NOx burner. Its compact design features a pre-calibrated linkageless control system, a variable speed fan to conserve energy and low 60 ppm NOx performance at maximum load.

**A complete pre-assembled and factory calibrated package burner, the Superflame™ Pak saves money and labor on installation and tuning and virtually eliminates routine calibration.**

At about 60% the size of competitive models, the Superflame™ Pak is the perfect burner for new or retrofit applications in ovens, furnaces, dryers, and other environments where high performance heating is required. It is delivered pre-programmed from the factory for plug-and-play installation and requires virtually no calibration.

Two versions are available with capacities of 800,000 BTU/hr to 1.8 MM BTU/hr and heating ranges from 500° to 1,900° F, with a minimum input of 30K BTU. Its 40:1 turndown ratio accommodates a wide range of heating demands.

## Summary Of Features And Applications

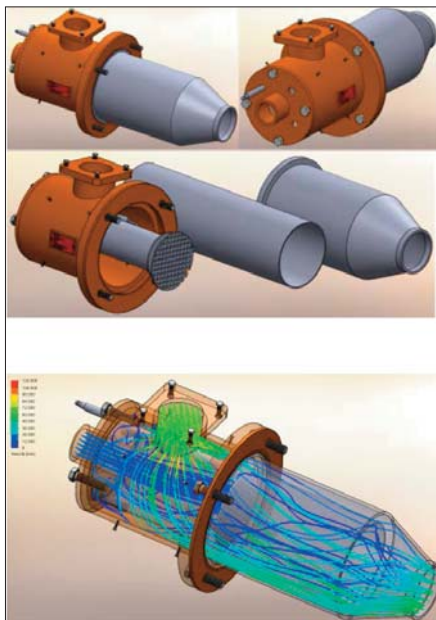
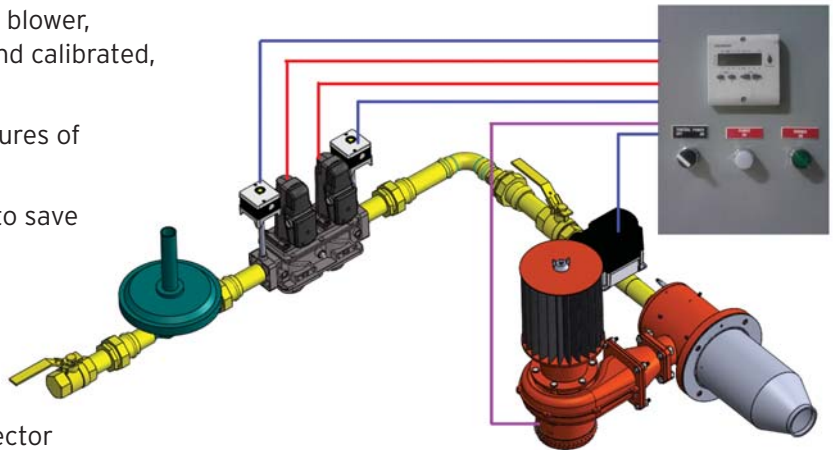
Attribute	Specs
Capacity Range	800,000 & 1,800,000 BTU/hr
Turndown Range	40 to 1
Max. Process Temp.	500° F (260° C) to 2,500° F (1,371° C)
Fuels	Natural Gas, Propane, Butane
Applications	Heat treat and forging in: Aluminum, copper, ferrous metal, iron, non-ferrous metal, steel (flat and long); incineration in waste applications; heat treat in ceramics; glass
Configuration	Full unit with air blower and gas train. More compact than other packaged burner brands and lower NOx emissions at <60 ppm.



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## Product Specifications: Superflame™ Pak

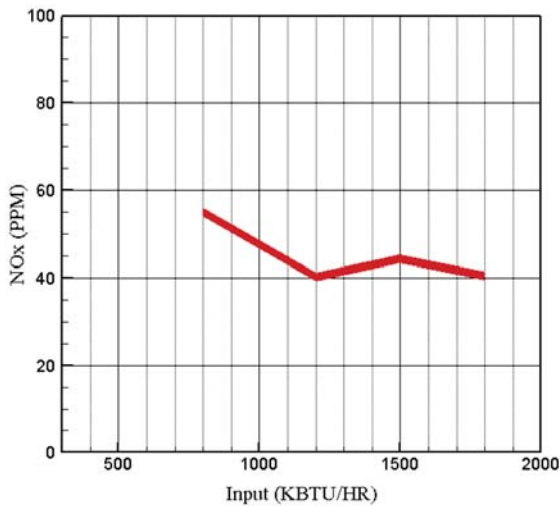
- Complete packaged burner assembly with air blower, controls, filter and gas train, factory tested and calibrated, ready for drop-in installation
- Low CO<sub>2</sub> and NO<sub>x</sub> levels at process temperatures of 500° F to over 2,500° F
- Variable speed air-blower with PWM Control to save on energy costs
- Programmable load control
- Accurate air/gas ratio control
- Two gas safety valves with Proof of Closure
- Reliable flame monitoring with UV flame detector
- Automatic pre-purge, ignition and post-purge
- Turndown ratio up to 40:1
- Direct spark ignition
- High speed flame for uniform furnace temperature
- High pressure and low pressure switches



Fuel	Natural Gas
Design Firing Rate	1,500,000 BTU/HR
Maximum Input	1,800,000 BTU/HR
Gas Inlet Pressure	1" wc ~ 16.8" wc
Ambient Temperature Limit	-15 ~ 140° F
Air Modulation	Variable Speed FAN
Gas Modulation	40:1
Air Pressure	2" wc ~ 18" wc
Flame Detector	UV Scanner



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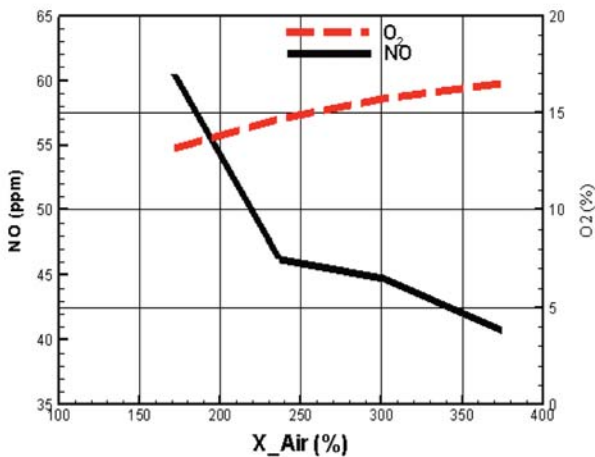
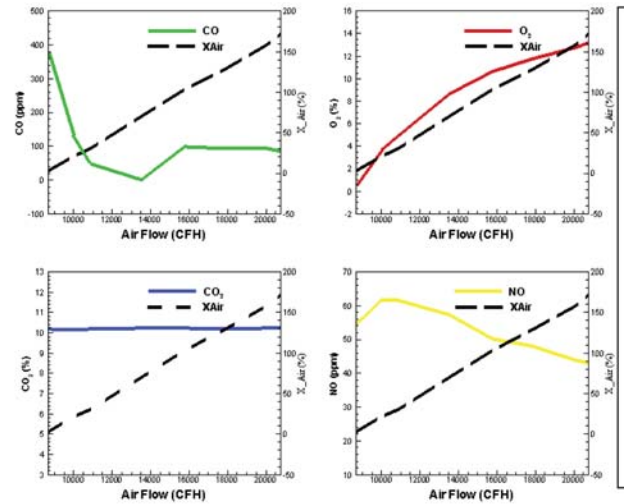


### The NOx emission varies with firing rate:

- From 800k BTU/Hr. to 1,800k BTU/Hr.
- Dry 3% O<sub>2</sub> Base
- Temperature range: 1,700<sup>0</sup> F-1,900<sup>0</sup> F
- Excess air within 15-20%

### NOx Emission data for 800k BTU/Hr.

- Dry 3% O<sub>2</sub> Base
- Temperature range: 1,700<sup>0</sup>F-1,900<sup>0</sup>F
- Gas Pressure from 3.3 to 9.3 in. WC
- Air Pressure from 3 to 17 in. WC
- Ambient temperature ~ 88<sup>0</sup>F



### NOx Emission data for 300k BTU/Hr.

- Dry 3% O<sub>2</sub> Base
- Temperature range: 1,350<sup>0</sup>F-1,550<sup>0</sup>F
- Gas Pressure from 1.8 to 3.3 in. WC
- Air Pressure from 3 to 6.7 in. WC
- Ambient temperature ~ 85<sup>0</sup>F



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