Burner Bulletin

Energy Sabre 600
Single-Ended Radiant Tube Burner

Best In-Class Fuel Efficiency
Using Spin-Works HeatCor™ technology in conjunction with a second heat exchanger (the Dual-Finned Combustor Tube), the Energy Sabre 600 transfers a larger portion of combustion exhaust heat back to the burner air supply, providing high preheat temperatures. The burner design has been optimized to offset the high preheat temperatures using high velocity, staged combustion.

Superior Performance
The Energy Sabre 600’s patent pending design improves fuel efficiencies by more than 15% over competitive single-end recuperative burners, while also reducing recovery time by 50% on real-time production loads. These can translate into significant production improvements from your furnace at lower cost. Energy Sabre also delivers unmatched tube temperature uniformity, ensuring long radiant tube life.
Energy Sabre 600
Single-Ended Radiant Tube Burner

For indirect heating applications where fuel efficiency, temperature uniformity, and low emissions are imperative.

How It Works
The HeatCor™ is an advanced patented silicon carbide heat exchanging insert (HEI) that uses 3D printing to easily integrate with process burners to provide increased efficiencies in a wide range of applications.

Features
• Thin Wall Silicon Carbide for high temperature operation with excellent thermal shock resistance and long life
• Helical Channels increase surface area to maximize pre-heated combustion air temperatures
• Ideal for applications in Steel & Aluminum processing furnaces to reduce fuel consumption

Benefits
• Reduced Fuel Use
• Reduced Emissions
• Lower Operating Costs
• Longer Life Span than Alloy Recuperators
• Increased Performance

SER Retrofit Solutions
Improve the performance, heat output and fuel efficiency of existing furnaces.

The new Energy Sabre 600 burner can enhance performance where existing burners and external recuperators have slowly deteriorated the overall efficiency of the furnace. As a result of installing the new Energy Sabre, end users can drastically improve both product quality and productivity as more of the energy input will be uniformly transferred to the product. The Energy Sabre 600 can be mounted in horizontal or vertical configurations and is suitable for continuous or batch type furnaces with a variety of atmospheres. Contact Selas Engineering to have your Energy Sabre custom sized and built to plug-and-play into your furnace today!

Patent pending, application docket no. 92281-045414

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