**ECLIPSE SER V5**

**SELF-RECUPEERATIVE BURNERS**

*The SER V5 burner delivers the best fuel efficiency of any burner in its class.*

With the burner and enhanced performance recuperator coaxially mounted inside a radiant tube, the SER V5 internally transfers combustion exhaust heat back to the burner air supply in a counterflow pattern, providing high preheat temperatures.

**Exceptional Performance**

The new, high efficiency recuperator design incorporates a unique dual finned combustor to provide an increased heat transfer surface for greater fuel savings. It also delivers exceptional heat flux and temperature uniformity. SER V5 cuts fuel costs from 35% to 55% over sealed ambient air burners and even more when replacing atmospheric type burners.

**Additional SER V5 Benefits**

- NOx emissions are reduced by more than 50% over conventional recuperative burners.
- Self-recuperative design eliminates the need for external recuperators and insulated piping.
- The insulated mounting flange and exhaust housing improve heat recovery while creating a much cooler working environment.

**Easy to Use**

- Burners can be installed either vertically or horizontally in nearly any furnace, either gas or electric. Thanks to the use of high tech materials, the SER V5 burner weighs less than competing burners making it is easier to install.
- Integral air and gas orifices with convenient rear access allow for easy set-up, monitoring and maintenance.

**Single-Ended Radiant Tube Burners**

**Metallic Outer Tube Option**

For furnace temperatures up to 1850°F (1000°C), the SER V5 is available with metallic outer tubes with diameters of 4-1/2", 6" and 8" (114mm, 152mm and 200mm).

**Ceramic Outer Tube Option**

Ceramic outer tubes deliver twice the heat output of metallic tubes. This option allows the use of shorter tubes, or fewer burners, to deliver the same amount of heat as with metallic tubes. With ceramic outer tubes, the SER V5 is less costly to own and maintain, with more reliable operation, reduced downtime and fewer production interruptions. In most cases, ceramic tubes can also withstand corrosive environments better than metallic tubes.
SER V5 Burners

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

Excellent Retrofit Solution

SER V5 burners are ideally suited to retrofit the burners and external recuperators in existing furnaces. The SER V5 can be mounted in horizontal or vertical configurations and is suitable for continuous or batch type furnaces with a variety of atmospheres. The SER V5 produces much lower emissions when compared to competitive burners. In addition to delivering dramatic fuel savings, the SER V5 provides higher heat output and excellent temperature uniformity. As a result, users can achieve an improvement in both product quality and productivity, with shorter batch cycle times.