



## SER V5 SELF-RECUPERATIVE BURNERS

Heat Furnaces with Greater Efficiency



# NEED FOR IMPROVED EFFICIENCY AND REDUCED EMISSIONS

For decades, Honeywell-Eclipse has been your trusted advisor in radiant tube burner applications and we are continually improving our products to ensure we can provide you with the latest technology for your applications.

Today, there is a growing focus on new burner technologies that will optimize production while reducing emissions and Honeywell's latest radiant tube technology does just that, and makes the transition from old to new technology quick and easy.

## **Drawbacks of Outdated Burners**

Burner performance is directly tied to fuel usage, efficiency, emissions, and overall operating costs. Using an old burner, when there is better technology available, will limit your ability to increase system performance and reduce overall operating costs.

In some cases, an outdated burner can be cost-effectively upgraded to new technology that will offer improved performance, reduced fuel usage, better efficiency, and lower emissions - and the new equipment will quickly pay for itself.

## **Upgrade to SERV5**

Around the world, Honeywell Thermal Solutions burners are the preferred choice when there

are rigorous industrial heating requirements. Ongoing technology developments have enabled us to make the best burners on the market even better!

Honeywell Thermal Solutions customers can easily retrofit their existing SERV1 and V3 burners to the advanced capabilities of the SERV5 Series self-recuperative burner. This advanced burner offers increased fuel efficiency and reductions in NOx emissions by 50%. It also has a longer tube life with silicon carbide, leading to less downtime and lower maintenance. Switching to the V5 now will get you ahead of the maintenance curve and guarantees that you will be able to get replacement parts.



### Modern Solution, Better Performance

The SER line of industrial burners are used in the most demanding production environments, where optimal efficiency and superior performance are critical. Typical applications include:

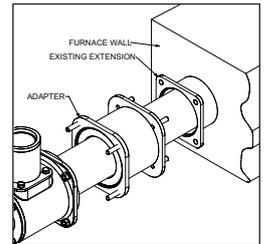
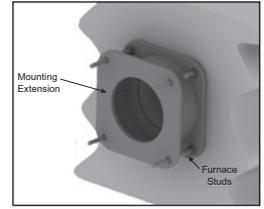
- Indirect-fired Furnaces
- Continuous Lines
- Tempering
- Annealing
- Hardening
- Galvanizing

The new SER V5 delivers the best fuel efficiency of any burner in its class. This modern, single-ended radiant tube burner employs a nozzle-mixing configuration. Its new,

high-efficiency recuperator incorporates a unique dual-finned combustor to provide an increased heat transfer surface for greater fuel savings. The SER V5's innovative design also delivers exceptional heat flux and temperature uniformity.

### Easy Retrofit Installation

The Eclipse SER V1 and SER V3 burners can easily be replaced with new SER V5 burners by installing the V1/V3 to V5 Adapter Flange before replacing your burner. The V1/V3 to V5 Adapter Flange must be bolted to the existing mounting extension to ensure proper alignment.



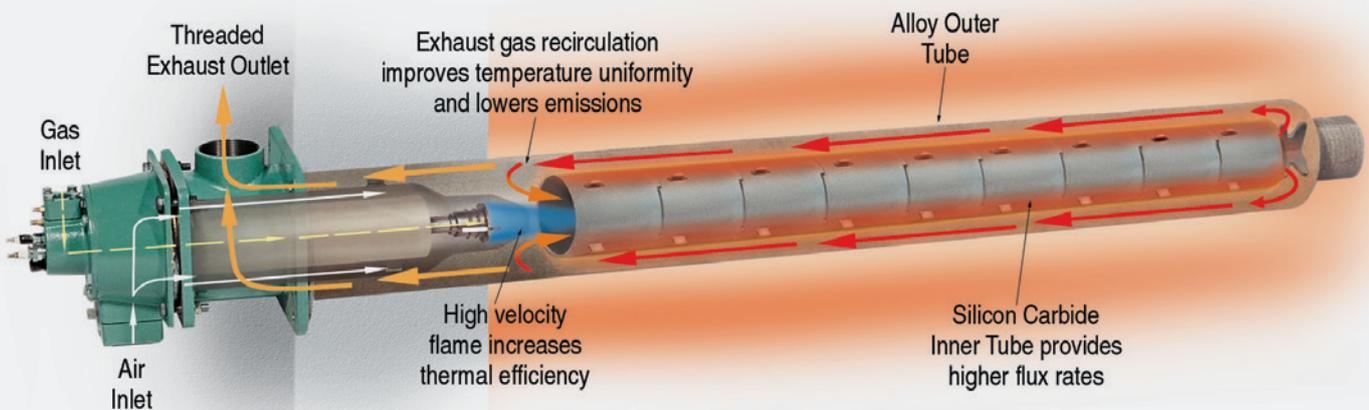
## New Technology, Superior Results

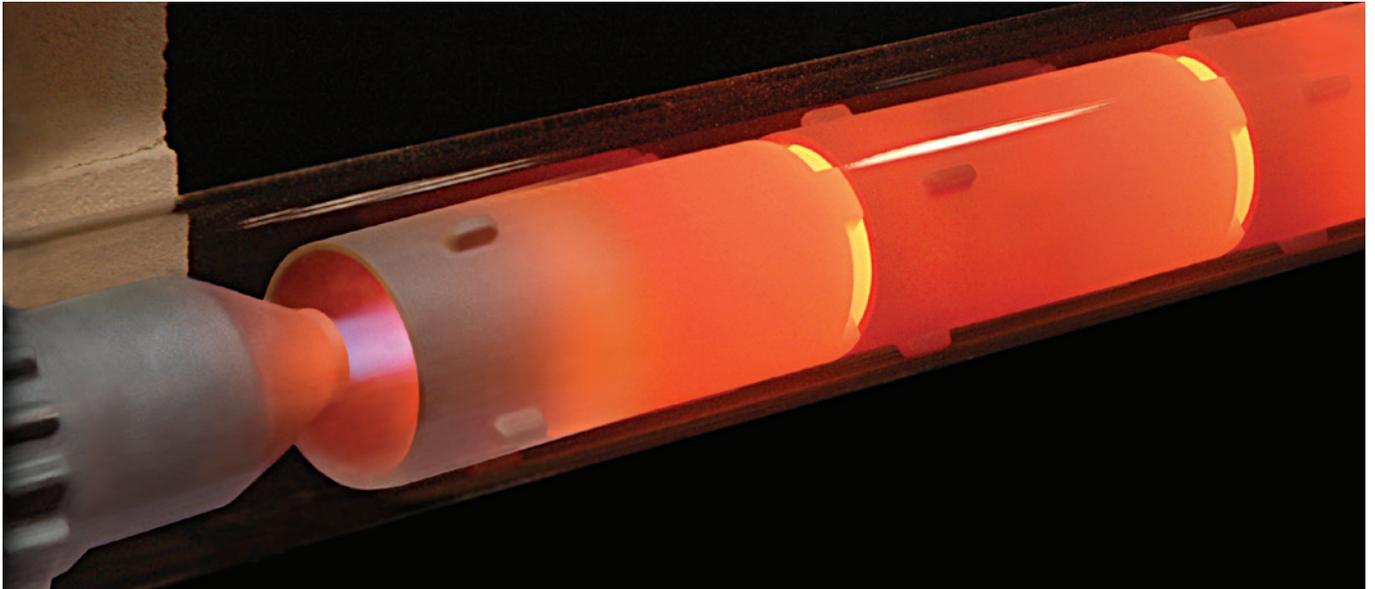
Honeywell Thermal Solutions developed the low NOx SER V5 burner to utilize a state-of-the-art combustion technique. The burner and enhanced performance recuperator are co-axially mounted inside a radiant tube, allowing for internal transfer of combustion exhaust heat back to the burner air supply in a counter-flow pattern. This provides high preheat temperatures. In addition, the burner's 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.

Featuring a compact design, the SER V5 burner is easy to install and set up. It is up to 40% lighter than earlier SER burners and competitive models. The burner can be mounted either vertically or horizontally in nearly any furnace, either gas or electric.

### Advantages of SER V5

- Suitable for continuous- or batch-type furnaces with a variety of atmospheres
- Produces much lower emissions when compared to legacy burners
- Delivers dramatic fuel savings vs. older technology
- Fuel cost reduction from 35% to 55%
- Provides higher heat output and excellent temperature uniformity
- Allows for improvement in both product quality and productivity
- Enables shorter batch cycle times





## How Honeywell Can Help You

At Honeywell, we're dedicated to improving your industrial operation by optimizing the design and performance of its combustion systems. We know that the best performance requires calculation, planning and execution – starting with proper hardware selection, followed by installation and tuning – resulting in efficient operation.

Honeywell Thermal Solutions delivers the most comprehensive line of industrial and commercial thermal solutions on the market. Our extensive product portfolio spans from burners and controls, to valves and complete combustion solutions.

### For more information

The Honeywell Thermal Solutions family of products includes Honeywell Combustion Safety, Honeywell Combustion Service, Eclipse, Exothermics, Hauck, Kromschröder and Maxon. To learn more about our products, visit [www.ThermalSolutions.honeywell.com](http://www.ThermalSolutions.honeywell.com) or contact your Honeywell Sales Engineer.



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