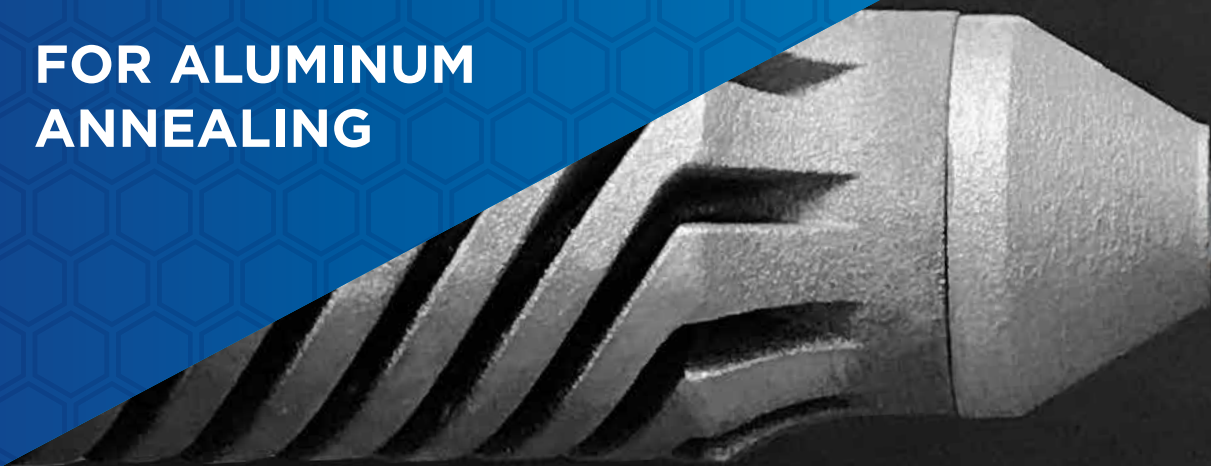


# TOTAL BURNER SOLUTION

## FOR ALUMINUM ANNEALING



2% - 10% heat release with  
**SPYROCOR®**

Up to 70% - 85% efficiency improvement with  
**HEATCOR™**

**SINGLE-ENDED RADIANT TUBE**



**U-TUBE**



**W-TUBE**



Improved uniformity with  
**PYROCOR™**

Up to 50% NOx reduction with  
**NOXBUSTER®**

Advanced combustion with  
**3D-PRINTED BURNERS**



# TOTAL BURNER SOLUTION FOR ALUMINUM ANNEALING

The annealing furnace consumes a significant amount of energy and generates carbon and nitrogen oxide emissions. Saint-Gobain Performance Ceramics & Refractories offers a unique burner solution for Aluminum Annealing to improve the radiant tubes' energy usage, emissions, and thermal performance.



up to  
**15%+**  
energy  
savings

## SPYROCOR® RADIANT TUBE INSERT

The „twisted tape“ design of the SpyroCor® advanced radiant tube insert recovers heat lost in exhaust gases.

### BENEFITS

Advanced silicon carbide microstructures provide high thermal conductivity and shock resistance

Long service life

High radiant output



up to  
**80%+**  
efficiency  
improvement

## HEATCOR™ RECUPERATOR

A 3D-printed ceramic recuperator that pre-heats combustion air for high efficiency burner performance.

### BENEFITS

Thin-wall silicon carbide offers the highest rates of heat transfer and thermal performance

Variable twist and channel cross-section provides optimized efficiency with the lowest pressure drop

Working temperature up to 1,350°C



up to  
**50%+**  
reduction of NOx  
emissions

## NOXBUSTER® RADIANT TUBE INSERT

NOxBuster® patented design suppresses NOx formation via internal exhaust gas recirculation within the radiant tube.

### BENEFITS

Novel design combines recirculation and staged combustion for optimum

NOx reduction using HeatCor™

