SOLEX™ BURNER

5 ppm NOx PERFORMANCE

JOHN ZINK™
A KOCH ENGINEERED SOLUTIONS BUSINESS

Achieving 5 ppm NOx emissions has traditionally required flue gas treatment solutions such as Selective Catalytic Reduction (SCR) systems. The SOLEX burner delivers similar NOx emissions and performance using proven combustion methods combined with years of industry experience.

Innovation You Can Rely On

The SOLEX burner can achieve 5 ppm NOx emissions regardless of the fuel composition and independent of furnace temperature. The burner is designed with two significant combustion zones to achieve these emissions levels from start-up to full capacity with minimal CO emissions. In addition, the SOLEX burner's compact flame lengths solve many issues ultra-low NOx burner technologies face in the market today.

PERFORMANCE

NOx Emissions

- Can replace the need for SCR or other NOx reducing technology
- Independent of: fuel compositions >75% H2, air preheat, furnace temperature, operation range, firebox heat density
- High predictability and repeatability

CO Emissions

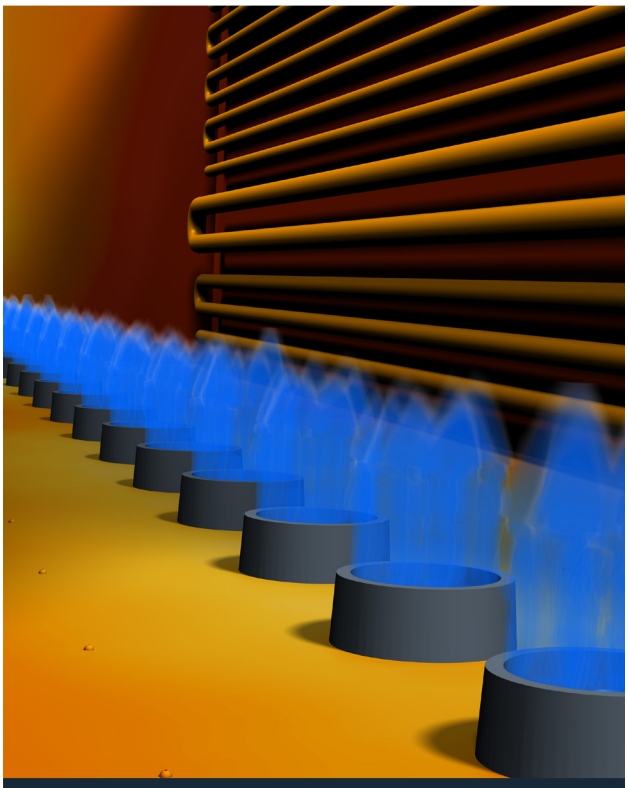
- Decoupled from cold furnace temperatures
- Near-zero CO emissions at start-up and turndown conditions

Flame

- Lengths less than half of ultra-low NOx staged fuel burners
- Solution for tight burner spacing arrangements
- Round or flat flame options

Retrofits

- Fits traditional ultra-low NOx burner footprints
- Upfired, downfired, horizontally fired



The SOLEX burner achieves 5 ppm NOx and near-zero CO at start-up, all with a short flame length.

SIMPLE MECHANICAL CONSTRUCTION

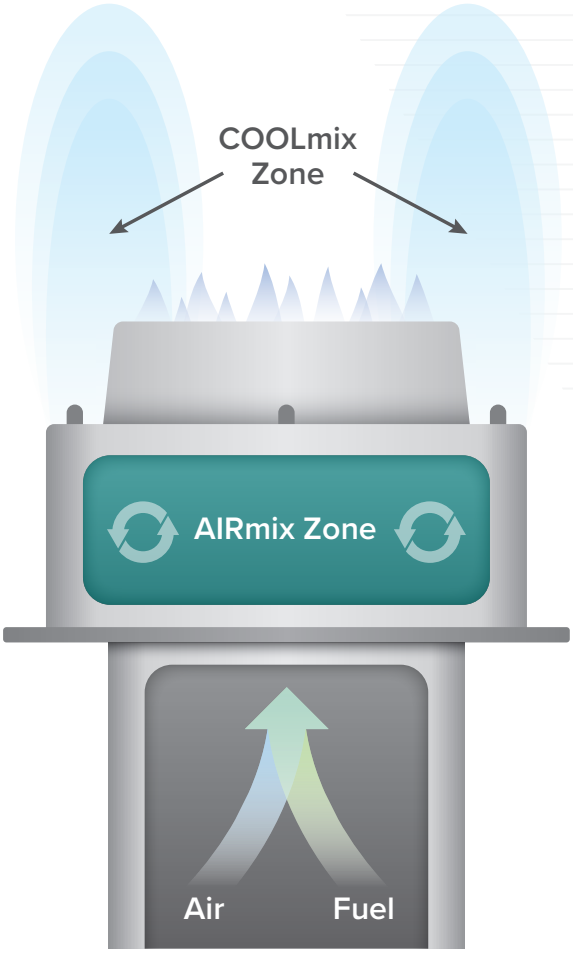
- Single piece tile with a robust geometry
- Individually removable tips
- Single point air supply
- Serviceable parts for online maintenance
- ARIA™ air register and control
- Compatible with pilots, UV scanners, ionization rods and igniters

SYSTEM REQUIREMENTS

- Two fuel zones
- Air-fuel ratio controls and supporting hardware
- Heat releases ranging between 1 MMBtu/hr (0.3 MW and +20 MMBtu/hr (+5.9 MW)
- Advanced combustion controls to enable a burner-only solution that achieves SCR level NOx emissions

GLOBAL REACH

John Zink has locations all over the map, with thousands of employees worldwide.



AIRmix™

JPatent-pending controlled fuel-air ratio combustion zone anchored within the burner tile.

COOLmix™

Staged fuel diluted by furnace gases. Utilizes patented Remote Fuel Staging to meet stack O2 setpoint.

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