

WALFIRE™ RADIANT WALL BURNER

The Highest Hydrogen Compatibility Available From A Radiant Wall Burner

The risk of flashbacks has increased considerably in recent years, causing higher maintenance costs and worse complete system replacements. The problem is that many crackers have changed their feedstock from a naphtha to gas. This causes a dramatic increase of hydrogen in the fuel gas to the burners. Unfortunately, the premix concept for most radiant wall burners reaches its operational limit here, allowing these high hydrogen levels to increase the risk of flashback and your exposure to unexpected expenses.

WALFIRE is the solution. Especially designed to work with up to 100% hydrogen with no risk of flashback, the WALFIRE delivers the lowest possible NOx emissions in these applications. In addition, WALFIRE'S single-point fuel injection and all stainless steel construction keeps maintenance requirements low.

AT A GLANCE

The WALFIRE burner draws upon decades of radiant wall burner experience in reforming and olefins furnaces across the globe to deliver superior performance and benefits.

- 100% no-flashback guarantee, due to diffusion concept
- The lowest possible NOx emissions for such applications
- INFURNOx[™] technology
- Minimal maintenance, stainless steel design





Up to 100% H2 fuel in your radiant wall application? Use WALFIRE.

DESIGN

- Low, easy maintenance
 - All stainless steel construction
 - Compact burner layout
 - Easily removable staged fuel injector
 - Stainless steel metal liner to minimize muffler insulation erosion (if applicable)
- Slide-N-Lock™ primary air door (optional)
 - Ease of adjustability
 - Durable construction ensures reliable performance
- Compact design
 - In many cases can be retrofitted into existing furnaces
 - Typical tile dimension: 18" x 18" (457 mm x 457 mm)
- Multi-component tile for reduced weight
- Fitted with John Zink Aria™ air inlet
- Possibility to add jackshaft
- Can be supplied with pilots, UV scanners, ionization rods and igniters
- Low noise designs available



Put the highest hydrogen compatibility available from a radiant wall burner to work for you.

PERFORMANCE

- Less than 82 dBA noise at 3 ft or 1 m
- Fuel flexibility including up to 100% hydrogen
- Extremely low gas pressure required <0.5 bar(g) for 0.3 MW
- Specifically designed to provide a radial flame that lies flat against the fired wall preventing flame projection into the process coils
- Customizable flame geometry to fit tightest installations
- Very large air ports which are virtually impossible to plug during normal operating conditions (dust/sand)

AIRSIDE CAPACITY

• Typical design heat release ranges from 0.5 MMBtu/hr



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Ask about Walfire today.

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