

## E-Class Infrared Burners

6-inch gas impingement type burners generate intense, concentrated radiation. They are typically used in industrial applications (curing coatings on steel) and food applications (baking).


## Applications:

- Curing coatings on steel
- Baking


## How It Works

Selas E-Class Infrared burners are impingement type infra-red generators incorporating shaped refractory blocks. Rows of small ports direct flame against the curved block surfaces, heating them to temperatures ranging from $1800^{\circ} \mathrm{F}$ to $2200^{\circ}$. Infrared
burners produce a high intensity, concentrated radiation. In addition, the curvature of the refractory directs a hot, turbulent stream of exhaust gases toward the product, scrubbing the surface of vapor films and enhancing heat transfer.

## Operating Principles

Selas E-Class 64IR and 67IR burners produce a concentrated stream of exhaust gases. When they are mounted facing down, the exhaust will travel from 10 " to $12^{\prime \prime}$ before losing momentum and rising. They can be operated with a turndown of 10:1. Radiant output drops in proportion to decreasing gas input. Infrared burners may be ignited by direct spark or by a spark-ignited blast type pilot. Flame monitoring may be by flame rod or U.V.scanner.

## Performance

- 67IR - 60,000 Btu/section at 8" w.c. mixture pressure
- 64IR - 30,000 Btu/section at 8" w.c. mixture pressure
- Develops high radiant temperatures to $2200^{\circ} \mathrm{F}$
- Strong forward velocity convection heat produced along with high intensity infrared


## Features

Turndown of 10:1
Available in single (64IR) or dual (67IR) profiles
May be mounted facing up or down

## Strong forward velocity heat

Optimum combination for certain applications


Curvature concentrates exhaust stream.

Dimensions

| Pipe | Maximum Number <br> of Sections |  | Dimensions <br> In Inches |  | Weight Per <br> Section, Lbs. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{6 4}$ IR | $\mathbf{6 7}$ IR | $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{6 4}$ IR | $\mathbf{6 7}$ IR |
| $1-1 / 2$ | 10 | 5 | $7-5 / 8$ | $15 / 16$ | 8 | 12 |
| 2 | 20 | 12 | 9 | $1-3 / 16$ | 9 | $12-1 / 2$ |
| $2-1 / 2$ | 22 | 14 | $9-5 / 8$ | $1-7 / 16$ | $10-1 / 2$ | $13-1 / 2$ |
| 3 | 40 | 26 | $10-3 / 16$ | $1-3 / 4$ | $11-1 / 2$ | $14-1 / 2$ |
| 4 | 82 | 42 | $11-3 / 16$ | $2-1 / 4$ | 13 | 16 |
| 6 | 100 | 90 | $13-3 / 8$ | $3-5 / 16$ | 17 | 20 |

## Benefits

Excellent thermal process control

## Allows wide process flexibility

Effective heating regardless of direction

## Enhances heat transfer

Perfect for steel coatings and baking

