

# MR-86 Infrared Burners

## Ideal for Food Production Processes



**The MR-86 is a 6" x 8" gas-fired infrared surface combustion burner. Its metal alloy foam emitter and stainless steel body make it an outstanding choice for many food production processes such as browning, pre-cooking or roasting meat. Its high radiance enables rapid searing of meat, allowing the product interior to remain moist. The MR-86 performs well in a wide variety of industrial applications requiring corrosion resistance, high heat flux density and low combustion velocity.**

The MR-86 has a maximum capacity of 17,000 Btu at 3.5" w.c. and reaches a maximum emitter temperature of 1700°F. It is designed to operate using an oxygen level of 19.1%-19.3%. Its radiant output is approximately 65% infrared and 35% convective heat. The MR-86 has a turndown ratio of 2.5 to 1, allowing it to run at lower temperatures (e.g., 1100°F) during line slowdowns or when processing heat sensitive product. Its ability to



quickly cool down prevents product damage in the event of a line stoppage. Upon re-start, the burner will quickly return to full fire and peak performance in seconds, maximizing labor efficiency while minimizing energy costs.

The MR-86 emitter is made of fine porosity metal alloy foam that provides an even combustion surface and consistent air/gas flow to prevent internal flashing. The emitter is enclosed in a stainless steel frame that is welded onto the housing, and is sealed with a high temperature gasket to eliminate escape pathways and ensure optimum air/gas flow. Since this is a flat-faced burner, it can be placed close to the product, enabling faster line speeds and enhancing energy efficiency.



The all stainless steel body of the MR-86 provides resistance to heat and chemicals including those typically used in the food industry. The full perimeter weld option is available for added corrosion resistance and to create a complete seal between the frame and housing. This prohibits entry of any foreign substances, such as cleaning compounds or by-products of the manufacturing process, into the burner body.

The MR-86 burner sections can be attached to the manifold using a short, 1-1/2" or long, 2-3/8" union connector and nipple assembly. The burner sections can be mounted horizontally or vertically on a manifold.

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Selas's engineers will design will design and supply your entire process heating system, including combustion control equipment. These systems reflect a wealth of application knowledge that has been developed over more than 60 years of infrared service to the industry. Our technology leadership can provide your company with the utmost in durability, efficiency, and cost effective process heating solutions.

