

MR-7 Infrared Burners

Compact Atmospheric Infrared Burner



The MR-7 is a compact atmospheric infrared burner (7.0"x3.625") that can be fed with an inspirator mixer (atmospheric) as opposed to an aspirator mixer (premix). It is a surface combustion burner that generates low heat flux infrared radiation.

This model has a lower radiant velocity than a typical pre-mix gas-fired infrared burner. As an atmospheric burner, the rated input capacity of the MR-7 is 700 Btu/hr/linear inch or 190 Btu/hr/square inch. The fuel source can be either propane or natural gas. This burner is an excellent choice for process applications where less intense infrared radiation is needed, such as plastic thermoforming.

Because it does not require an electric blower to operate, the MR-7 is used in a number of applications where portability and compact size are



important, such as thermoplastic striping equipment for highways and roadways. It is also commonly used for heating and cooking foods, as well as in commercial and residential BBQ grills.

The fine porosity metallic foam emitter has the durability essential for mobile applications. The emitter provides an even combustion surface and uniform air/gas flow to prevent internal flashing. It is secured in the housing by a stainless steel frame and is sealed with a high temperature gasket to eliminate escape pathways and ensure optimum air/gas flow.



Additional design features of the MR-7 include a cast iron body, stainless steel internal components and stainless steel hold down frame. The burners are available in a corrosion resistant nickel plated construction for applications in harsher environments.

By operating at recommended firing pressures, the possibility of burn-back or flashing is greatly reduced. The orifice size for the inspirator is dependent upon the number of burner sections on the manifold. The greater the number of sections, the greater the orifice size. Typically, a two section burner is used. Larger burner arrays require special manifolding, such as multiple inlets.

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For higher temperature operation, the MR-7 burner can be used in a premix system (aspirator mixer and gas regulator) to increase the heat output to 1,000 btu/hr/linear inch. Contact Selas for further details on outputs of both atmospheric and premix burner systems.

