



Selas MR-7 Burner

A compact atmospheric infrared burner that can be fed with an inspirator mixer (atmospheric) as opposed to an aspirator mixer (premix).

How It Works

The MR-7 is a compact atmospheric infrared burner (7.0" x 3.625") 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 premix 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.

Applications:

- Thermoplastic striping equipment for highways and roadways
- Commercial and residential BBQ grills
- Plastic thermoforming



Operating Principles

Additional features of the MR-7's design are its high quality materials of construction, which include cast iron bodies with stainless steel internal components and 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 (see the selection table). Typically, a two section burner is used. Larger burner arrays require special manifolding, such as multiple inlets.

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.

Selas continues to supply the AB-7 burner along with its spare parts, but it has been upgraded to the model MR-7.

Features	Benefits
Operates on either propane or natural gas	Provides process & installation flexibility
Sealed with a high temperature gasket	Eliminates escape pathways
Does not require an electric blower to operate	For portability and compact size applications
Rugged cast iron with stainless steel components	Durable for low maintenance operation
Fine porosity metallic foam emitter	Durable for mobile applications

