

# RETAIN-A-FLAME

Gas Burner Nozzles



## Features

- Designed to produce long cylindrical blast flame
- Manual or spark ignition option
- Available with threaded or flanged connections
- Available in straight or elbow options



## Benefits

- Produces long flame for greater heat distribution
- Excellent flame stability and retention
- Minimizes possibility of flashback on low fire

Hauck's 'Retain-a-Flame' burner nozzles are recommended for firing of gas-air mixtures where a small amount of excess air induced around the nozzle is allowable. These nozzles are ideal for firing either into the open ports of furnaces, or into the open without a combustion chamber. They have been successfully used for firing kilns, heat treating and melting furnaces, ovens, air heaters, boilers, kettles, immersion tubes and for ladle heating or drying.

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*Combustion Excellence Since 1888*

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# RETAIN-A-FLAME

GAS BURNER NOZZLES



## ADVANTAGES OF THE RETAIN-A-FLAME GAS BURNER NOZZLE

Produces Long Flame for Greater Heat Distribution

Excellent Flame Stability and Retention

Minimizes Possibility of Flashback on Low Fire

Retain-a-Flame nozzles are available in two versions: the Series 1100 RFS straight nozzle and the Series 1200 RFE elbow nozzle. They are available in sizes ranging from 40,000 to 2 million Btu/hr (12 to 586 kW).

These nozzles will retain the flame at their tips under usual operating conditions. Flame retention is achieved by removing part of the air-gas supply and burning it in a recess around the main burner opening. The nozzle design permits a wider range of mixture pressures without blowing the flame off the burner tip or backfiring. Little turbulence is caused in the main stream of gas mixture, with a resulting long, cylindrical flame of good stability.

All RFS straight nozzles are designed to produce a long cylindrical, torch type blast flame of unusually good stability. These flame characteristics provide heat distribution over a greater distance. These nozzles may be ignited manually and, if properly equipped, by a spark ignition system.



Series 1100 RFS Straight Retain-A-Flame Nozzles (top).  
Nozzle attached to High Pressure Gas-Air Inspirator (bottom).



Series 1200 RFE Elbow Retain-A-Flame Nozzle (top).  
Nozzle attached to High Pressure Gas-Air Inspirator (bottom).

The RFE elbow and straight nozzles combine, in one unit, an excellent flame retention capability and the ease of mounting associated with flanged units. These highly functional units have many advantages. Their unique design not only permits a wider range of operation but also ensures the proper delivery of the mixture to the nozzle, thus minimizing the possibility of flashback on low fire.

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