

# BBG

Gas Beta Burner



## Features

- Designed for low pressure air operation
- Rugged heavy gauge steel construction
- Available with alloy or refractory tile
- Direct spark or pilot ignition
- UV flame supervision
- Packaged versions available with air and fuel manifolds
- Preheated air up to 900°F (480°C)

## Benefits

- Supports a wide variety of applications
- Highly reliable, durable design
- Broad range of air/fuel ratios
- Tile options allow burner to be tailored to application



Hauck's BBG Gas Beta Burner is designed for exceptionally long life in continuous or intermittent operation in furnace, kiln and dryer environments. The BBG is well suited for applications operating under backpressure. Burner capacities range from 2.2 million to more than 87 million Btu/hr (645 to 25,500 kW). Preheated air versions are available up to 900°F (480°C). The BBG is designed to operate on any clean industrial fuel gas with a higher heating value of 500 Btu/scf (19.7MJ/nm<sup>3</sup>) or greater with ambient or preheated combustion air. Available with a converging alloy tile for ambient combustion air only for temperatures up to 1800°F (980°C), and converging or diverging refractory tiles for temperatures up to 2800°F (1540°C).

**HAUCK MANUFACTURING  
COMPANY**

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**Combustion Excellence Since 1888**

# BBG

GAS BETA BURNER



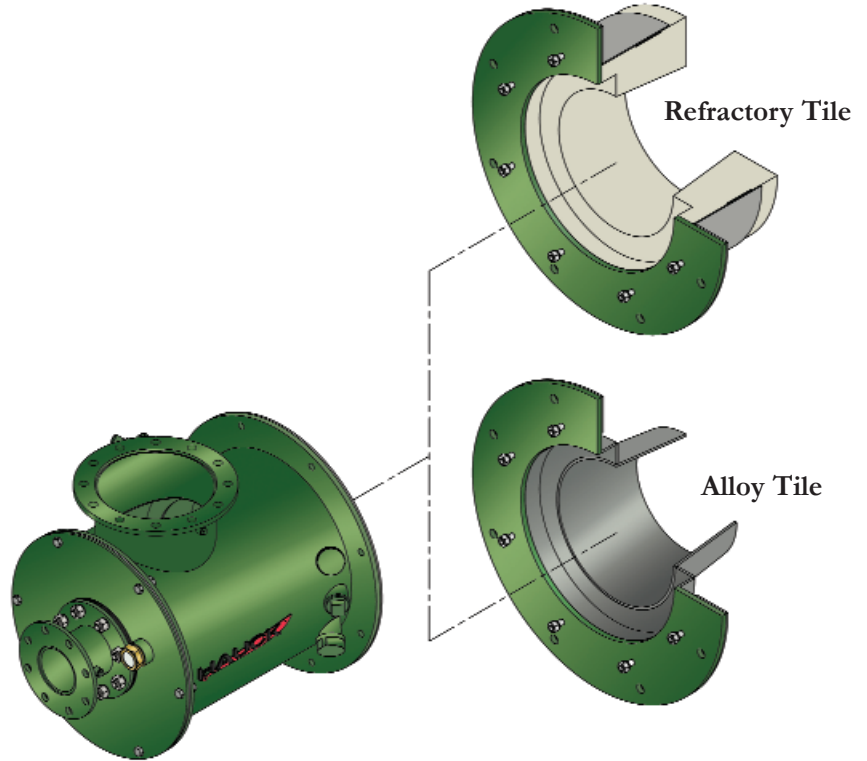
## ADVANTAGES OF THE BBG

**Supports a Wide Variety of Applications**

**Highly Reliable, Durable Design**

**Broad Range of Air/Fuel Ratios**

**Tile Options Allow Burner to be Tailored to Application**



**BBG Burner with Tile Options**

Beta burners are baffle type burners designed for low air pressure operation in a wide range of applications including steel reheat furnaces, rotary kilns, gypsum kettles, air heaters and incinerators. Available with alloy tile for ambient combustion air only for temperatures up to 1800°F (980°C), and refractory tile for temperatures up to 2800°F (1540°C). With a refractory tile, the 1000 and 2000 series can operate with air preheat temperatures up to 600°F (315°C), and the 3000 series can operate with air preheat temperatures up to 900°F (480°C).

The BBG burner will fire any clean industrial fuel gas with a higher heating value of 500 Btu/scf (19.7MJ/nm<sup>3</sup>) or greater with ambient or preheated combustion air. Capacities range from 2.2 million to more than 87 million Btu/hr (645 to 25,500 kW).

On ratio turndown is approximately 8:1 with higher thermal turndown possible with excess air firing. Nominal burner air supply pressure is 8 osig (3450 Pa). Nominal gas supply pressure is 4 osig (1725 Pa).

Hauck recommends the use of a self-supporting refractory or alloy tile for soft and hard wall applications. An optional mandrel for field pouring of a burner port can be supplied. Consult Hauck for mounting options.

Direct spark ignition is available on the BBG\_204 through \_212 burners, while gas pilot ignition is available on all size burners. The BBG burner can utilize UV flame supervision.