Capacity Range: 320,000 to 5,150,000 BTU/hr





## **High Velocity Burners**

Used primarily where a high recirculation rate of the products of combustion is required.

## **How It Works**

The Selas High Velocity Single Tunnel Hot Shot (HS) series is used primarily where a high recirculation rate of the products of combustion is required. They produce a high-velocity stream of hot gases at the exit of the burner tunnel which will give a high degree of heat penetration into the work in a furnace. The result being greater efficiency with reduced fuel costs. Burners can also operate with excess air or fuel providing additional versatility in process applications.

## **Applications:**

- Periodic Kilns Shuttle Kilns - Tunnel Kilns
- Large Carbottom **Furnaces - Heat Treating - Stress** Relieving
- Ladle Heating -**Impingement Heating** - Reverberatory **Furnaces**



## **Operating Principles**

The Selas Hot Shot Single Tunnel burner operates on natural gas and delivers 320,000 to 5,150,000BTU/ HR at 20 oz. air pressure at the burner. It is available in five sizes from 1-1/2" to 6" NPT air connections. With a turndown of 10:1, the HSST is suitable for wide process variability. It produces excess air of 300% (without pilot) and excess fuel of 40% (without pilot). The burner assembly includes pilot, flame monitoring and site (site glass optional). The refractory block includes steel or alloy block casing for installation in fiber-lined furnaces.

Features	Benefits
High-Velocity: 250 ft./sec.	Fast penetration, good temperature uniformity
High velocity output creates high recirculation rate	Greater efficiency and fuel savings
Turndown 10 to 1	Excellent thermal load variability
Flanged air/gas connections	Simplifies installation
Burners can operate with excess air or fuel	Added versatility in process applications

