

**Capacity Range:**  
12,000 to 2,500,000 BTU/hr



## SW Flat Flame Burner

*The swirling air stream of the Selas Sidewinder II Gas Flat Flame Excess Air Burner produces a negative vortex at the refractory block mouth. Gas enters the vortex, mixing rapidly, producing intense combustion. The inverted parabolic shape of the burner block port works with the vortex to pull flames flat to the furnace wall at firing rates and mixtures.*

### How It Works

Sidewinder Gas Burners are nozzle-mixing units with a high velocity, spinning, air flow. The swirling air stream produces a negative vortex at the refractory block mouth. Gas enters the vortex, mixing rapidly,

producing intense combustion. The inverted parabolic shape of the burner block port works with the vortex to pull flames flat to the furnace wall at firing rates and mixtures.

### Applications:

- Billet Heaters
- Cover Annealers
- Car Furnaces
- Roof Fired Rotary Furnaces
- Galvanizing Tanks
- Crucible Melters
- Process Heaters
- Heat Exchangers
- Holding Ladles



Diverse Combustion Technologies. One Reliable Source.

# Operating Principles

Refractory burner tiles are cast with a 60% alumina lightweight aggregate. Blocks are formed in rugged cast-iron holders with four stainless steel anchors embedded in the refractory. These threaded anchors extend out from the holder for installation of mounting brackets or lifting lugs. The standard refractory material used for burner blocks is rated by the manufacturer at 3000°F permitting continuous operation of a furnace up to 2700°F.

Features	Benefits
Flames remain flat to furnace wall	Avoids direct flame impingement on work
Simple nozzle mix construction	No potential for flashback
Flanged air & gas connections	Fewer pipe unions required
Rugged cast iron construction	Years of trouble-free operation & low maintenance
10:1 Turndown	Wide thermal modulation possible



11012 Aurora Hudson Rd • Streetsboro, OH 44241  
**1-800-523-6500 • [sales@selas.com](mailto:sales@selas.com)**  
**[www.selas.com](http://www.selas.com)**