

Capacity Range:
25,000 Btu/Hr/Inch



Selas Extended Length Superheat™ Burner

Constructed like refractory-lined furnaces in miniature and are capable of heating up to 25,000 BTU/hr/inch.

How It Works

Selas Extended Length Superheat Slot Burners Are Available For Slot Lengths Up To 60".

Selas Superheat Slot Burners are constructed like refractory-lined furnaces in miniature. Available with slots lengths from 3/4 to 60 inches, they are capable of heat

release rates as high as 25,000 Btu/hr/inch. At temperatures of approximately 2800°F and velocities up to 600 ft./sec., "super-heated" gases cut through the boundary layer of dead air around workpieces to achieve heating rates suitable for high speed production lines.

Applications:

- Brazing
- Fire Polishing
- Flame Annealing
- Flame Hardening
- Pre-Heating



Diverse Combustion Technologies. One Reliable Source.

Operating Principles

The gas/air mixture, generated by a Selas PosiMix™ Combustion Control System, is fed through precision ports and into a close-tolerance ceramic structure. Combustion takes place inside the burner and, as a result, is undiluted by secondary air.

The combustion reaction proceeds along the surface of the pre-formed high-temperature refractory lining, allowing its corrugated walls to attain white-hot incandescence. The resulting intense radiation plays across the direction of travel of the gases and accelerates the combustion reaction.

The lining is closed-in at the nose to form the blast opening. The reduced cross-sectional area of the blast opening forces the “superheated” combustion gases to exit the burner at very high velocities, providing outstanding heat transfer to the work piece. The slim, compact “slotted” shape of these burners facilitates fixturing close to the work piece, even in crowded conditions. They may be positioned on either their short or long axis in relation to the work. Installation is simpler compared to multiple individual burners since only one gas/air connection (up to three on longer units) is required.

The compact, durable ceramic structure is encased in a stainless steel casing attached to a plenum chamber behind the port plate. All parts are interlocked by their shape and sequence of assembly, allowing for differential expansions.

Features	Benefits
High heat release to localized areas	Flame temperatures up to 2800° F
Slot lengths from 3/4 to 60 inches	Blast velocities up to 600 ft/sec
Optional spark plugs	Instant, push-button ignition
Slim, compact design	Can be mounted close to workpiece
Burns commercial fuel gas and air only	Economical alternative to oxy/gas tips



11012 Aurora Hudson Rd • Streetsboro, OH 44241
1-800-523-6500 • sales@selas.com
www.selas.com