

**Capacity Range:**  
**35,000 - 58,800,000 BTU/hr**



## NM Series

*The NM nozzle-mix tunnel burner features short flames, wide turndown ranges and very stable combustion.*

### How It Works

Selas Single Tunnel/Multiple Tunnel Nozzle Mix NM Burners are designed for extremely wide turndown ranges. Gas and air are mixed only at the point of discharge, flashback is prevented.

Exclusive stepped tunnel design creates very high turbulence and internal recirculation in the flame. The combustion tunnel shape produces pressures in the flame that are lower than the furnace

pressure aiding flame retention. Ignition of main flame is smooth and stable in all sizes. Hot refractory surfaces on the blocks are not required for ignition. All sizes may be lighted and raised immediately to high fire with excellent flame stability.

Each burner is equipped with an integral mounting flange for pressurized firing up to 10 psig furnace pressure (consult factory).

### Applications:

- Forging Furnaces
- Air Heaters
- Annealing Furnaces
- Fume Destructors
- Melting Furnaces
- Ovens
- Dryers
- Malleabilizing Furnaces
- Incinerators



**Diverse Combustion Technologies. One Reliable Source.**

## Operating Principles

NM burners develop capacity ratings at low pressure drops. Economical low pressure air blowers are adequate. Flanged connections are standard. Pipe unions are normally not required. Flame lengths are very short. Large combustion chambers are not required. When operating in air heaters flame shield block extensions are used to prevent flame quenching. Multiple tunnel units produce higher capacities with short flame lengths by spreading the flame over a large area. Cross ignition ports between tunnels are provided to stabilize the flames at normal firing rates and fuel-air ratios. Individual pilots are recommended for each tunnel with main flame supervision.

Each NM burner can be ordered with a micrometer type gas flow adjuster. Pressure referenced control systems are used to control heat inputs.

Features	Benefits
High heat inputs	Intense combustion
Flanged construction	Eliminates pipe unions
High flame velocities	Better furnace circulation
< 1 ft./million BTU/hr when firing into air stream	Short flame lengths
Will burn at high fire with cold block	No warm up required



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