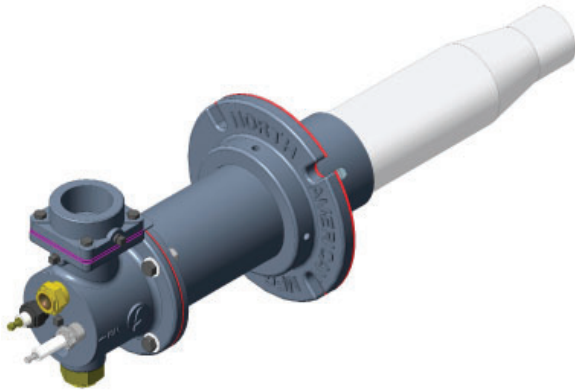


Product Overview | 4445 & 4445N Tempest®

High velocity gas burner for thick wall kilns and furnaces — standard lengths available for 9" to 40" wall thicknesses



Enhanced temperature uniformity and heat transfer promoted by recirculation of combustion products, improve both product quality and productivity in many kilns and furnaces. True high velocity burners entrain and recirculate products of combustion (poc) volumes seven or more times greater than the actual tile exit gas volume, potentially eliminating the need for excess air operation or hot gas recirculation fans.

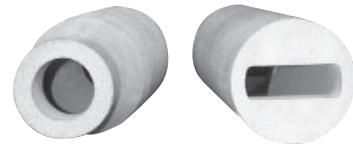
Designed for mounting in thick walls, the 4445 Tempest High Velocity Gas Burner places the tile discharge at the hot face, increasing entrainment and providing superior uniformity. Although used predominantly in ceramic kilns, other applications that can benefit from the 4445's high velocity characteristics and design features include:

- Box and Car Heat Treat Furnaces
- Galvanizing Tanks
- Lead and Zinc Pots
- Salt Baths
- and other thick wall applications

FEATURES

- Standard lengths available for 9" to 40" wall thicknesses longer lengths available on request
- Field adjustable mounting flange
- Suitable for up to 2900°F operation
- Low NOx emissions
- Tile options to fit the application:
 - Two tile materials: alumina/mullite, and metal alloy
 - Two tile exit shapes: round and slotted

Round tiles produce high forward thrust, Slotted tiles produce wider and thinner flames with more entrainment.



UPDATED 4445N FEATURES

The new 4445N-2 through -4-B design replaces the same size 4445 burners, and has many improvements, including:

- 90° Air inlet for all sizes
- Built-in gas limiting orifice valve (sizes -2 through -4-B)
- New baffle to prevent incorrect placement of igniter
- Simplified tile mounting for easier tile replacement
- Improved ceramic insulators for igniter and flame rod

To maintain a common naming system the 4445-5 and -6 sizes (which have always had a 90° air inlet) have been renamed 4445N-5 and 4445N-6.

Most spare parts for the 45° air inlet legacy burners will continue to be available, and many of the 4445N improvements will be incorporated into the legacy 4445 replacement parts.

4445/4445N Performance Data

Burner Size	-2	-3	-4-A	-4-B	-5	-6
Air Flow, not burning at 16 osig (scfh)	2200	3600	6500	7500	10900	17900
Air Flow, Stoic at 16 osig (scfh)*	1950	3250	5700	6900	9260	15000
Max. % XSA (ignition and flame rod limit)**	1500	1000	1000	1000	1500	1000
Max. % XSF (ignition and flame rod/UV limit)	30	30	30	30	30	30
Flame Length (in.), Stoic at 16 osig air	12	16	24	28	24	26
Flame Diameter (in.), Stoic at 16 osig air	2	3	4	4.5	3	4
Gas Pressure (osig), Stoic at 16 osig air	10	9	10	9	8.0	8.4

*Nominal capacities. Actual capacities may vary based on burner length and tile selection.

** UV limits may differ.