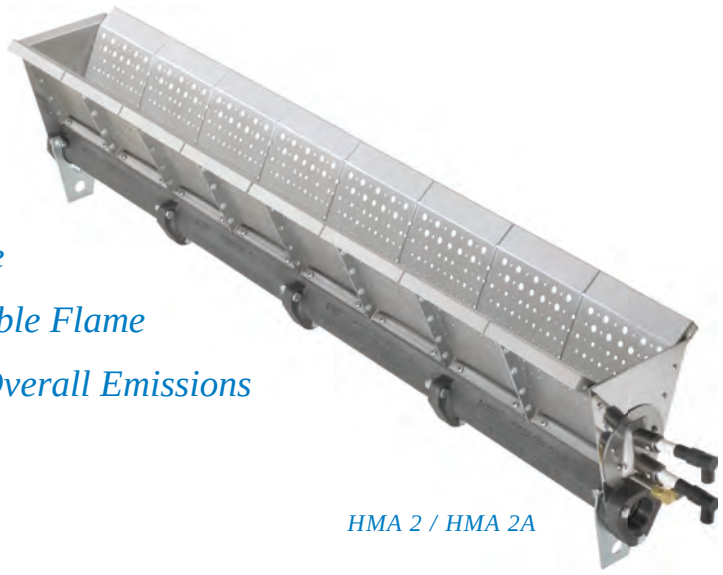
HMA 2 / HMA 2A Series

Direct - Fired Gas Burners

Two Stage Combustion Technology



HMA 2 / HMA 2A

Higher Temperature Rise

Wider Operation Range

Shorter, More Stable Flame

and Lower Overall Emissions

Midco's Own Two Stage Technology in Direct-Fired Gas Burners

Midco International's innovative two stage combustion burner is not just a modification or improvement of the old, but a completely different approach to direct-fired combustion. The two-stage combustion improves control of the flame process, meets and exceeds the ANSI Standards while outperforming the competition. By having two separate flames within the burner combustion zone, the flame is more stable, shorter and cleaner, permitting the reduction of emissions levels and allowing for higher temperature rise and higher tolerance to varying conditions when placed in the profile opening.

Two Stage Combustion Provides Unsurpassed Flame Stability and Lower Emissions

Burner Sections Available in

- *Cast Iron*
- *Aluminum or*
- *Nickle Plated*

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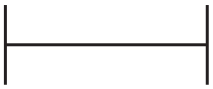
Specifications

* Firing rate	Gas Manifold Pressure	Pressure Drop Across Burner	Pilot Capacity	Pilot Manifold Pressure	Burner Turn-down Ratio	Flame Length	Air Velocities Across Burner
Up to 750,000 Btu/hr/ft	NG 4.2 - 8″ W.C. LP 1.6 - 3″ W.C.	0.05 to 1.4″ W.C.	12,000 Btu/hr	NG 3.5″ W.C. LP 2.0″ W.C.	30 to 1	10″ full ** firing rate	800 fpm to 4,000 fmp ***

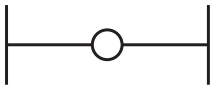
* Firing rate is dependent on the pressure drop across the burner.
** Flame length depends on design pressure drop and is measured from the end of the baffle.
*** For other operating velocities contact our Engineering Department.

Two Staged Technology for Direct-Fired Applications Plus Flexibility in Configuration

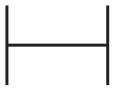
Straight, elbow and tee sections easily configure to desired capacity maximizing efficiency for installation and performance. Burners may be ignited by proven pilot or direct spark. Pilots are available for flame rectification or ultraviolet detection. Hot surface ignition systems are also available. Contact the Midco OEM sales team for specifications.



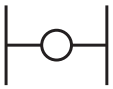
12″ Straight
H-1350
Area = .65 sq. ft.



12″ Straight Back Inlet
H-1361
Area = .65 sq. ft.

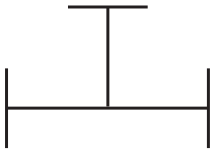


6″ Straight
H-1359
Area = .32 sq. ft.



6″ Straight Back Inlet
H-1398
Area = .32 sq. ft.

Elbow
H-1362
Area = .65 sq. ft.



Tee
H-1363
Area = .77 sq. ft.

Features and Benefits

Reduced NO_2 and CO Emissions: Lower emissions levels that are required to pass the ANSI Z83.4 and Z83.18 standards.

Higher Temperature Rise: The two stage combustion process lowers NO_2 emissions which is the limiting factor in temperature rise.

Increased Capacity: Up to 750,000 BTU's per foot. (Higher BTU levels can be achieved if ANSI Z83 Standards for CO and NO_2 emissions are not of a concern. Process heaters can fire up to 1,000,000 BTU's a foot or more.)

Increased Differential Pressure Drop and Higher Velocities: HMA-2 / HMA-2A burners can operate between 0.05″ to 1.4″ W.C. differential pressure range or in air velocity between 800 fpm to 4000 fpm.

Flame Stability: Two stage combustion provides better flame stability and emission control, allowing for a shorter flame and easier profile configuration.

Reduced Shipping Costs: A smaller, lighter casting than the competition's, can cut your freight costs up to 50%.

Turndown: 30-1 turndown can easily be achieved with proper modulation control and valves. (Higher turndown possible depending on equipment design.)

Casting Choices: Burner sections are available in iron, aluminum and nickle plated castings.

Do you need assistance in burner selection or installation? Just call our OEM Sales Team at Midco International direct today (toll free 866 705 0514) or visit our web site at www.midcointernational.com to find out more about our HMA line of burners.

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