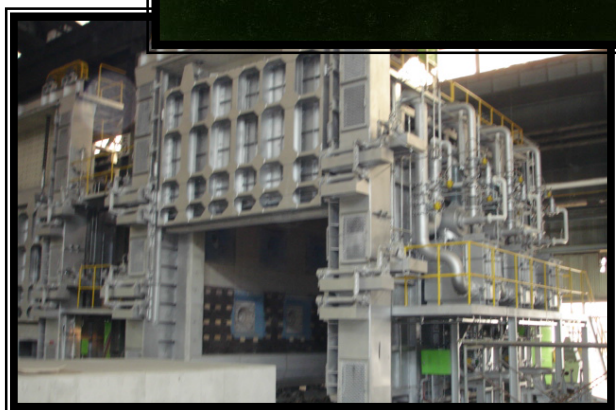
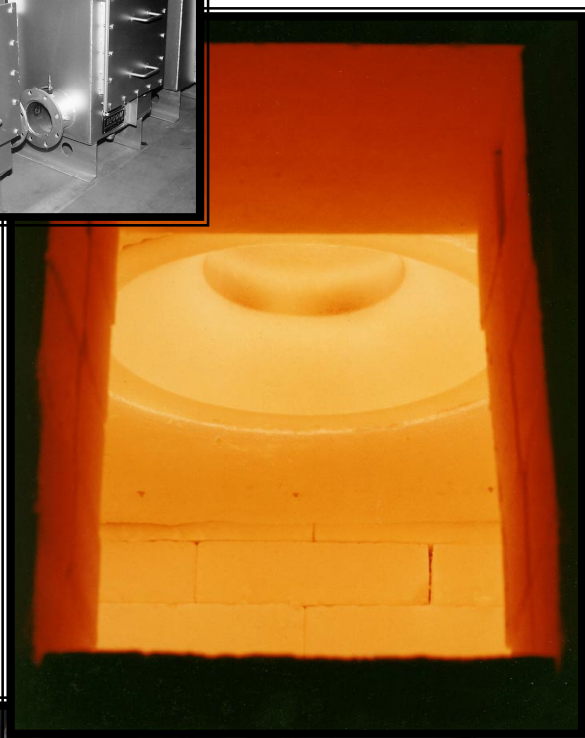


2400 Series

REGENERATIVE HIGH THERMAL RELEASE (HTR®) BURNER

Bloomengineering



APPLICATIONS

- Reheat Furnace
- Batch Anneal Furnace
- Forging Furnace
- Many Other Applications

FEATURES

- Proprietary Stabilization Principle
high-temperature radiation through
high speed combustion
- Extra rugged port block and mounting
plate construction
- More energy efficient than cold air or
hot air flat flame burners

CAPABILITIES

- High Thermal Release
- High temperature radiation without
flame impingement
- Ability to place heat where required
- Nominal capacity range:
1.0 MMBtu/hr (250 kCal/hr) to
4.0 MMBtu/hr (1,000 kCal/hr)

** Special capacity and special fuels
design by request.*

www.bloomeng.com

CAUTION: The improper use of combustion equipment can result in a condition hazardous to people and property. Users are urged to comply with National Safety Standards and/or Insurance Underwriters recommendations

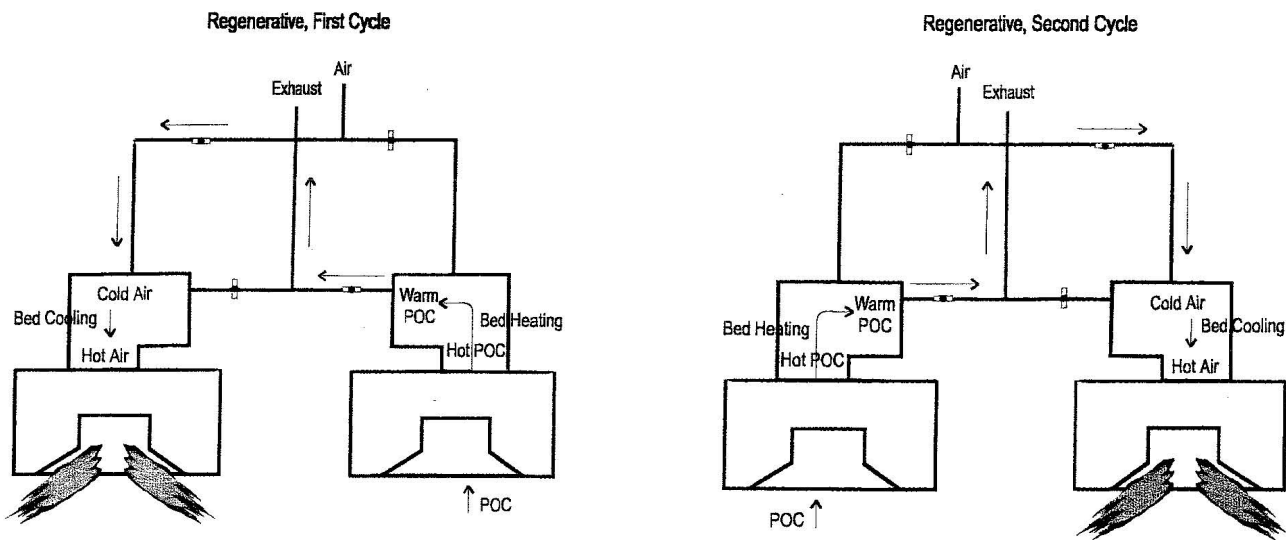
PERFORMANCE

TABLE 1 - Performance and Selection Chart at Nominal Capacity

Burner Designation ¹ 2400 - ____	Nominal Capacity		Pilot Part Number
	Air Pressure required @ nominal rating = 8" w.c.		
	Gas pressure required @ nominal rating = 2" w.c.		
	MMBtu/hr	MKcal/hr	
-010	1.0	250	3001-030
-015	1.5	375	3001-030
-020	2.0	500	3001-050
-025	2.5	625	3001-050
-030	3.0	750	3001-050
-040	4.0	1,000	3001-050

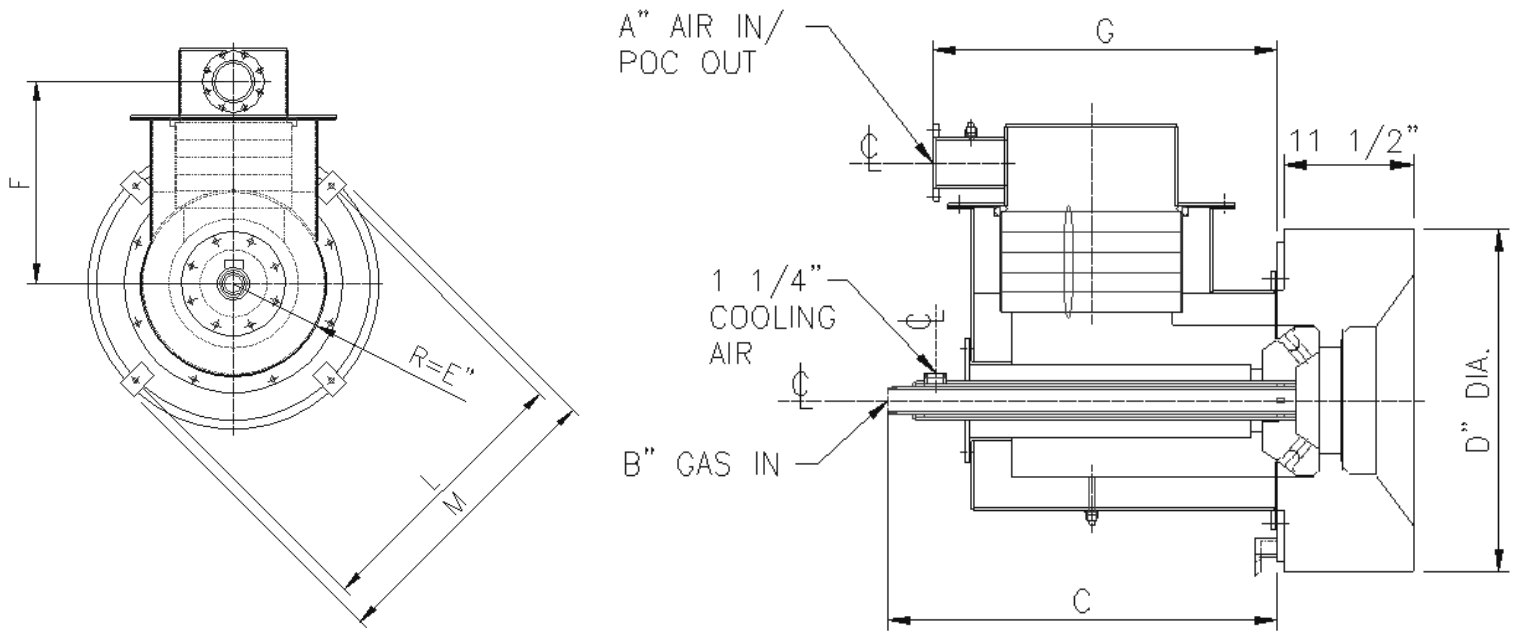
¹ Burner designation corresponds to approximate burner rating in MMBtu/hr (e.g. 2400-020 --> 2 MMBtu/hr)

FIGURE 1 - Operating Sequence for Regenerative Burners



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TABLE 2 - Burner Dimensions for Burner Size 2400-010 & 2400-015

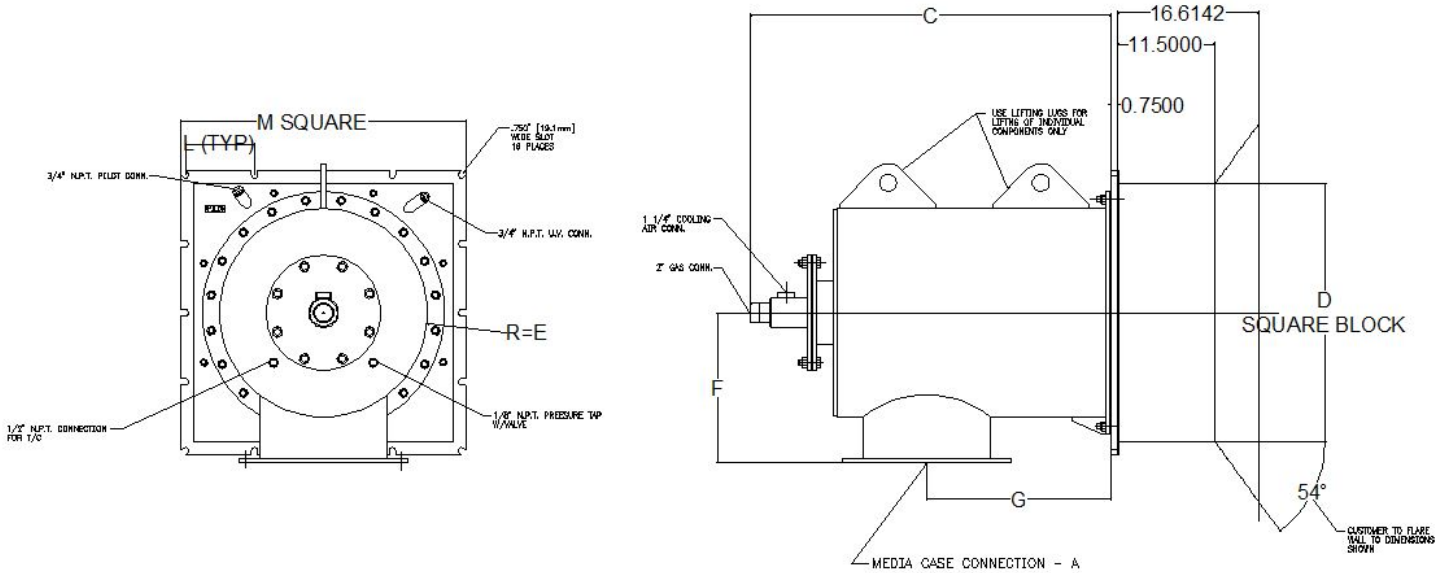


Burner Designation 2400 -	General Dimensions (in inches)									
	A	B	C	D		E	F	G	L	M
				Dia.	Sq					
-010	4	2	34 5/8	30 1/2	-	9 3/4	21 1/8	30 5/8	28 7/8	31 3/8
-015	4	2	34 5/8	30 1/2	-	9 3/4	21 1/8	30 5/8	28 7/8	31 3/8

NOTE: General Dimension Information. Please consult a Bloom Representative for dimensions on larger sizes and certified dimensions for construction

CAUTION: The improper use of combustion equipment can result in a condition hazardous to people and property. Users are urged to comply with National Safety Standards and/or Insurance Underwriters recommendations

TABLE 3 - Burner Dimensions for Burner Size 2400-020 thru 2400-040



Burner Designation 2400 - ____	General Dimensions (in inches)									
	A	B	C	D		E	F	G	L	M
				Dia.	Sq					
-010	4	2	34 5/8	30 1/2	-	9 3/4	21 1/8	30 5/8	28 7/8	31 3/8
-015	4	2	34 5/8	30 1/2	-	9 3/4	21 1/8	30 5/8	28 7/8	31 3/8
-020	6	2	43 1/4	-	30 1/2	12 1/4	17 5/8	21 3/4	8 1/8	33 1/2
-025	6	2	43 1/4	-	30 1/2	12 1/4	17 5/8	21 3/4	8 1/8	33 1/2
-030	6	2	43 1/4	-	30 1/2	12 1/4	17 5/8	21 3/4	8 1/8	33 1/2
-040	8	2	44 3/4	-	30 1/2	12 1/4	17 5/8	23 1/4	8 1/8	33 1/2

NOTE: General Dimension Information. Please consult a Bloom Representative for dimensions on larger sizes and certified dimensions for construction

CAUTION: The improper use of combustion equipment can result in a condition hazardous to people and property. Users are urged to comply with National Safety Standards and/or Insurance Underwriters recommendations

Application Guidelines *

FUEL CAPABILITIES **:

- Natural Gas
- LP Gas
- Coke Gas

****Please Consult a Bloom Representative for availability of other fuel types**

BURNER IGNITION:

- Pilot (*recommended*)
-

CONTROL:

- Pressure Balance Ratio Regulator
 - Volumetric Air Ratio Control
-

FLAME MONITORING:

- Provisions for Flame Monitoring
-

*** NOTE: Due to continual developments in the Bloom Laboratory and results from field research, the applicability of different fuels and other options listed above are constantly being updated. Please consult a Bloom Representative to inquire about the availability of any guidelines/options that are not shown above.**

SPARE OR REPLACEMENT PARTS

Spare Parts and Replacement parts are available for virtually all industrial burners and combustion systems supplied by Bloom Engineering in the past 50 years. Spare and replacement parts are manufactured to original dimensions and tolerances to ensure performance is maintained. For more information, please visit our website at www.bloomeng.com/burner-spare-parts.

CAUTION: The improper use of combustion equipment can result in a condition hazardous to people and property. Users are urged to comply with National Safety Standards and/or Insurance Underwriters recommendations

To **REQUEST A QUOTE** *, Please Contact your local representative at www.bloomeng.com/locate-arep
and provide the following information:

INFORMATION	UNITS
<i>General Information:</i>	
Application	-
Burner Input	(MMBtu/hr; kcal/hr; kW) in (HHV or LHV)
Quantity of Burners	-
Ignition Type and Fuel	-
<i>Main Fuel Information:</i>	
Fuel (s) and Heating Value (s)	(Btu/ft ³ ; kcal/Nm ³ ; MJ/Nm ³) in (HHV or LHV)
Fuel Flow	(scfh; Nm ³ /hr)
Available Fuel Pressure	("w.c.; psi; mbar; kPa)
Fuel Constituents	-
<i>Combustion Air Information:</i>	
Combustion Air Temperature	(°F; °C)
Combustion Air Pressure Available	("w.c.; psi; osi; mbar; kPa)
Minimum / Maximum Excess Air Required	(%)
<i>Flame Information:</i>	
Desired Flame Length	(feet; inches; m; mm)
Desired Flame Diameter	(feet; inches; m; mm)
<i>Furnace / Combustion Chamber Information:</i>	
Wall thickness	(feet; inches; m; mm)
Burner Assembly / Connection Requirements	-
Furnace / Chamber Dimensions or Drawings for Emissions estimate	-
POC (Products of Combustion) / Furnace Temperature	(°F; °C)
<i>Other Information:</i>	
Operational / Control Requirements (i.e. Turndown, Control Type)	-
Emissions Requirements (NOx, CO)	-
Chamber Backpressure	-
Oil / Atomizing agent Details	-
Any other special requirements	-

* **NOTE:** Information required to process a quote includes, but may not be limited to, the information specified above. Additional details may **also** be required to quote a combustion control system.

For more details and a complete listing of products,
please visit our website at:
www.bloomeng.com/industrial-burners

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