

1150-C Compact Regenerative Burner

APPLICATIONS

- Heat Treating
- Forging
- Aluminum Melting
- Many other new and retrofit applications

FEATURES

- Ultra High Energy Efficiency
- Flame luminosity while incorporating the NO_x reducing principles of flameless combustion technology
- Excellent flame shape and direction
- No external exhaust gas re-circulation requirement
- Completely self-contained design (i.e. no separate fuel injection lances)

CAPABILITIES

- Stability from cold start-up (30% excess air is required during cold start-up only)
- Very low NO_x emissions throughout the burner's operating range
- Gas-only firing capability



FUEL CAPABILITIES*

Natural Gas \ Liquified Petroleum Gas (LPG) Fuel \ Hydrogen

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



BURNER IGNITION

Pilot



CONTROLS

Volumetric Fuel/Air Ratio (recommended) \ Impulse



FLAME MONITORING

UV Detector

NOTE: Individual UV detectors for the pilot and main flame are used.



OPTIONS

Burner Port Block

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.

1150C SERIES BULLETIN

TABLE 1: Burner Pressure Ratings for Nominal Flow Capacities - Natural Gas Fuel with 10% Excess Combustion Air

Burner Designation	Nominal Air Flow at 2200° F (SCFH)	Baffle Air at 2200° F Burner Firing ("W.C.)	Baffle Exhaust at 2200°F 80% Pullback ("W.C.)	Media Drop at 2200° F Burner Firing Exhausting ("W.C.)
1150-010-C	11,000	6"	5.1"	5" / 3"
1150-020-C	22,000	8.9"	7.6"	10.8" / 6.3"
1150-025-C	27,500	6"	5.1"	5.5" / 3.3"

TABLE 2: Flame Dimensions for Nominal Capacities - Natural Gas Fuel with 10% Excess Combustion Air

Burner Designation	Nominal Capacity (MM BTU/hr HHV)	Standard Port ID (inches)	Flame Length Expected (feet)	Flame Diameter Expected (feet)
1150-010-C	1.0	9.0"	4'	1.5'
1150-020-C	2.0	11.75"	5'	2'
1150-025-C	2.5	11.75"	6'	2'

To REQUEST A QUOTE: Please Contact your local representative at www.bloomeng.com/contact and provide the following information:

INFORMATION	UNITS
General Information:	
Application	
Burner Input	(MMBtu/hr; kcal/hr; kW) in (HHV or LHV)
Quantity of Burners	
Ignition Type and Fuel	
Main Fuel Information:	
Fuel (s) and Heating Value (s)	(Btu/ft3; kcal/Nm3; MJ/Nm3) in (HHV or LHV)
Fuel Flow	(scfh; Nm3/hr)
Available Fuel Pressure	("w.c.; psi; mbar; kPa)
Fuel Constituents	
Combustion Air Information:	
Combustion Air Temperature	(°F; °C)
Combustion Air Pressure Available	("w.c.; psi; osi; mbar; kPa)
Minimum / Maximum Excess Air Required	(%)
Flame Information:	
Desired Flame Length	(feet; inches; m; mm)
Desired Flame Diameter	(feet; inches; m; mm)
Furnace / Combustion Chamber Information:	
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)
Other Information:	
Operational / Control Requirements (i.e. Turndown, Control Type)	
Emissions Requirements (NOx, CO)	
Chamber Backpressure	
Oil / Atomizing agent Details	
Any other special requirements	

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