

MEDIUM VELOCITY LONG FLAME DUAL FUEL BURNER

MODEL: **MGOL**

BULLETIN : 203

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This long flame dual fuel burner features quiet combustion and large capacities at relatively low pressure. They have special type oil atomizer for # 2 or #6 fuel oil (heated to reduce its viscosity to 100 SSU).



This burner has provision for gas pilot and ultraviolet flame supervision device . Both gas and oil flames are stable – stable over a fairly wide range of air /fuel ratios . The burner can be used in cold sealed-in combustion chambers with light oil or gas .

Atomizer: This burner is equipped with special type atomizer. Oil and steam (or compressed air) are required at a minimum of 80 psig at the burner .

"Maximum steam and compressed air consumption rates are shown in the following Table.

They are for a no-oil flow condition ; actual usage will always be less-from 0.75 to 2.0 pounds of steam (or 0.5-1.5 SCM air) per gallon of oil , depending on the quantity of oil being atomized . (use these " maximum " figures to size piping . not to determine cost of the atomizing medium.)

Ignition and Flame Supervision: This Burner should be ignited by a pilot . Flame detector adapter should be ordered. Provision must be made for low fire start with 2.5 mbar main air or less.

The pilot must be the interrupted type since a constant pilot would overheat the mounting . If oil is the fuel , the flame supervisory device must be an ultraviolet unit.

SHOLEH SANAT ENG. & MFG. CO .

MANUFACTURER OF BURNERS FOR FURNACES

FUEL CONVERSION OF BOILERS & FURNACES, DESIGN, CONSULTATION AND INSTALLATION

REV.1 of 10th Oct. 2021

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COMBUSTION AIR CAPACITY, SCM/H

Air pressure at the burner (mbar)				
Burner Model	4	22	27	36
3300 MGOL				
6800 MGOL	2700	6000	6600	7600
14000 MGOL				

FLOW RATE of ATOMIZING MEDIUM

For pipe sizing only		
Burner Model	"Max" steam flow . Kg/hr with 80 psi steam	"Max" compr.air SCM/H with 80 psi air
4000 MGOL		
6800 MGOL	102	141
14000 MGOL		

Turndown: The burner can be operated with a constant steam pressure , turning down the oil and air only . The maximum available turndown on stoichiometric ratio is about 2 ½ : 1 . If the steam is throttled with the oil and air , a turndown ratio of 5 : 1 is possible .

Excess Air: This Burner is stable when running lean. Suggested maximum excess air is 50% at low fire and 150% at high fire , but these limits often can be exceeded under the proper conditions.

Installation: The burner does not include a refractory tile. The shape shown on the dimension drawing must be built into the combustion chamber wall.

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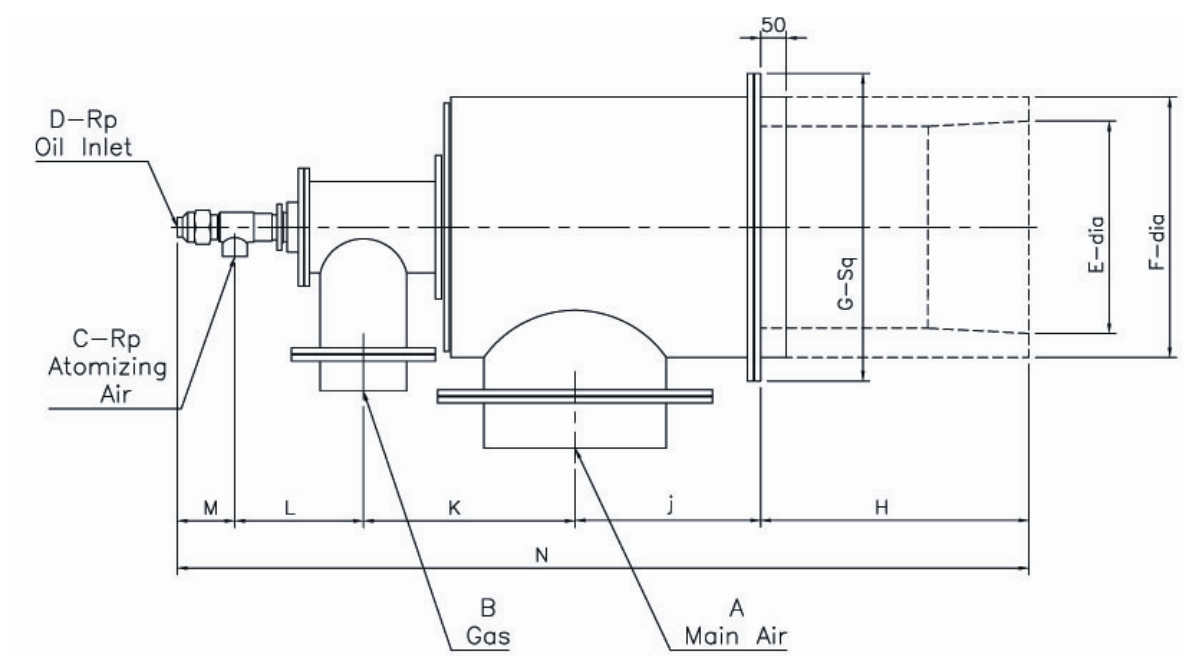
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Burner Model	A in	B in	C in	D in	E mm	F mm	G mm	H mm	J mm	K mm	L mm	M mm	N mm
3300MGOL	10	4	3/4	1/2	292	406	470	-	323	325	277	112	1078
6800MGOL	14	6	1	1/2	414	508	600	522	361	412	302	112	1706
14000MGOL	24	8	1.1/2	3/4	546	635	-	-	-	585	360	165	2514

- Furnace opening should be 3/4" larger than dimension F .
- After a length of 1.2 E flare out the tile at a 30° angle (60° included angle) .



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