

ATMOSPHERIC GAS MIXER

MODEL: **AG**

BULLETIN: 101

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Industrial atmospheric gas mixers are the first product of **SHOLEH SANAT CO.** This company manufactures the atmospheric mixers of the capacity between 10,000 to 1,800,000 Kcal /hr. In the cases that combustion chambers are in vacuum situations these capacities may reach to values almost 2.5 times greater.



AG mixer with STH burner head

TECHNICAL SPECIFICATIONS:

Throat diameter of burners and the air-gas mixing tube are designed such that a homogeneous air-gas mixture is produced for burner head. This shall cause a flame with high thermal efficiency.

According to the pressure existing in the combustion chamber, two types of burner heads are used with the industrial atmospheric mixers.

I - Burner heads equipped with the flame retention device for combustion chambers with atmospheric or vacuum pressure.

II - Sealed burner head for the combustion chambers with positive pressure. Turn down ratio with these burner head are 4 to 1

APPLICATION:

The industrial atmospheric gas mixers are used in:

A-Traditional Furnaces:

- Furnaces for melting of aluminum, brass, copper, cast iron and glass
- Heat treatment furnaces
- Heater of bitumen tanker
- Refractory brick burning
- Sand and mold heaters

B-Industrial Furnaces:

- Heat treatment furnaces
- Melting furnaces with operating temperature of up to 1400 °C

This mixer works with natural gas or LPG. The pressurized gas is injected into the air through a nozzle with high velocity, and making a vacuum condition causes the suction of air. The excess air can be secured up to 20% .

SHOLEH SANAT ENG. & MFG. CO.

MANUFACTURER OF BURNERS FOR FURNACES

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

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ATMOSPHERIC GAS MIXER

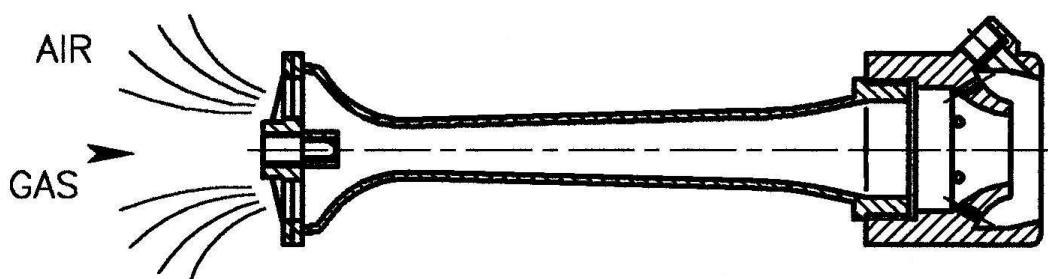
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Table of heat capacity (kcal/hr) with STH burner heads

| Gas Press. (Psi) Burner type | 5 | 10 | 15 | 20 | 30 |
|---------------------------------------|-------------------|-----------|-----------|-----------|-----------|
| | Capacity(kcal/hr) | | | | |
| 10 AG | 4,000 | 5,500 | 7,000 | 8,000 | 10,000 |
| 45 AG | 18,000 | 25,000 | 30,000 | 36,000 | 45,000 |
| 100 AG | 40,000 | 55,000 | 70,000 | 80,000 | 100,000 |
| 150 AG | 60,000 | 85,000 | 100,000 | 120,000 | 150,000 |
| 190 AG | 75,000 | 100,000 | 130,000 | 150,000 | 190,000 |
| 230 AG | 90,000 | 130,000 | 160,000 | 180,000 | 230,000 |
| 470 AG | 190,000 | 270,000 | 330,000 | 380,000 | 470,000 |
| 950 AG | 380,000 | 540,000 | 670,000 | 770,000 | 950,000 |
| 1800 AG | 730,000 | 1,000,000 | 1,250,000 | 1,400,000 | 1,800,000 |



Atmospheric mixer with STH burner head

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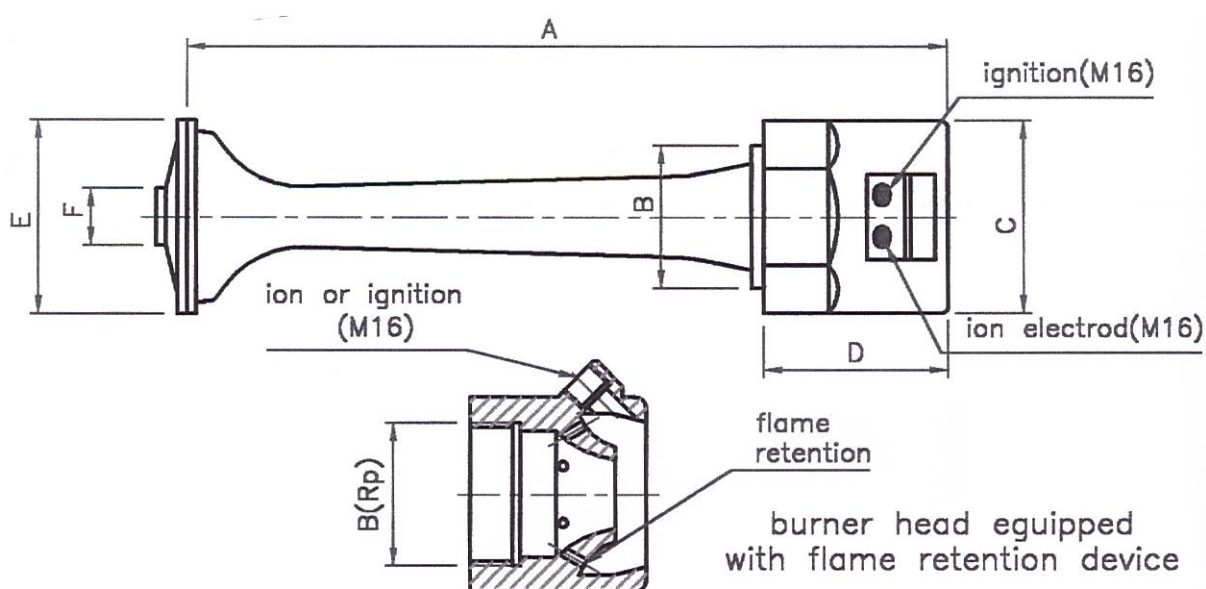
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| Burner type | Dimensions | | | | | |
|----------------|------------|---------|---------|---------|---------|---------|
| | A mm | B In | C mm | D mm | E mm | F in |
| 10 AG | 195 | ¾ | 40 | 40 | 47 | 1/4 |
| 45 AG | 275 | 1 | 55 | 48 | 96 | 1/4 |
| 100 AG | 300 | 1.1/2 | 64 | 54 | 96 | 1/2 |
| 150 AG | 470 | 2 | 90 | 87 | 101 | 1/2 |
| 190 AG | 560 | 2.1/2 | 95 | 94 | 200 | 1 |
| 230 AG | 605 | 3 | 120 | 81 | 200 | 1 |
| 470 AG | 750 | 4 | 150 | 154 | 200 | 1 |
| 950 AG | 950 | 6 | 212 | 200 | 277 | 1 |
| 1800 AG | 1200 | 8 | 140 | ---- | 350 | 1 |



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