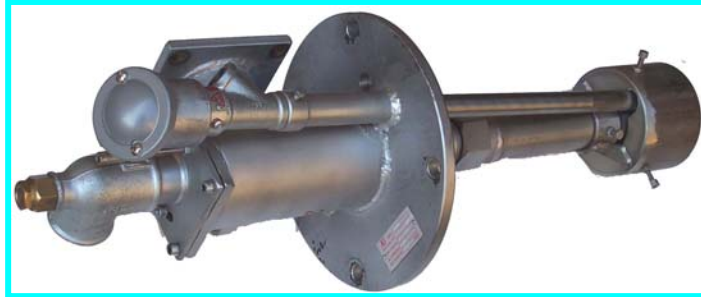




Fusar Bassini Astorre e C. Snc

RADIANT TUBE GAS BURNER TR... SERIES



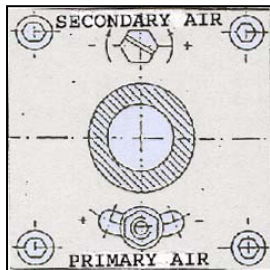
TR... burners are designed for firing into a tube which contains the flame end products of combustion, with high combustion efficiency, high tube temperature uniformity and long life of radiant tube.

The released energy is transferred from the surface of the tube in the furnace mainly by radiation; gas heated radiant tube are used extensively in thermal process plant, as an alternative to electric heating, where it is essential that the products of the combustion do not contaminate the furnace atmosphere; this is a requirement in many metallurgical heat treatment furnaces which use reactive and neutral atmospheres.

CAPACITY

	BURNER TYPE	CAPACITY KW	CAPACITY Kcal/h
▽	TR6	60	50000
▽	TR12	120	100000
▽	TR24	240	200000

BURNER CALIBRATION



The combustion air is divided into two streams : primary and secondary air. TR burners combine premix and nozzle - mix approaches to produce a highly luminous flame of optimum lengths. This design introduces some primary air to the gas supply prior to combustion. By adjusting the amount

introduced, flame length can be adjusted to produce extremely favorable temperature uniformity throughout effective surface area of the radiant tube.

The independent regulation of primary air from secondary air creates high diffusion flame and variable flame length to obtain higher temperature uniformity through the radiant tube surface.

CAUTION: The combustion system must be designed and installed meeting the law regulations in force. If the installation, the use and the maintenance are not carried out correctly, severe damages to things or persons might occur.

BURNER THERMOREGULATION

TR burners may be fired in three modes:

- Fuel - air ratio control mode;
- High - low mode ;
- On - off mode.

TR burner operates consistently over a wide range of firing rates, providing a turn - down ratio of 10 to 1.

COMPONENTS

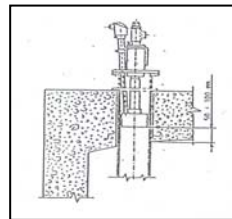
TR radiant tube burners include:

- housing for gas and air entry and distribution;
- primary air and secondary air adjusting devices for easy regulation;
- flame inspection port for UV detector;
- burner cup designed for optimum nozzle mixing and flame retention.

Each TR burners is also equipped with:

- Gas pilot burner with forced air supply and with one electrode for ignition and flame control, for quick ignition of main burner
- Gas adjuster to assure the desired fuel - air ratio to burner;
- Air orifice flow meter: for air flow measure to burner;
Gas orifice flow meter: for gas flow measure to burner

INSTALLATION



TR burners is flanged for easy mounting on radiant tube: see enclosed table for dimensions.

In general the distance between burner cup and furnace arc is included in 50 - 100 mm: this avoids overheating of radiant tube; **Pilot burner, main burner and the automatic**

burner control unit must be designed, installed and setted meeting the law regulations in force.

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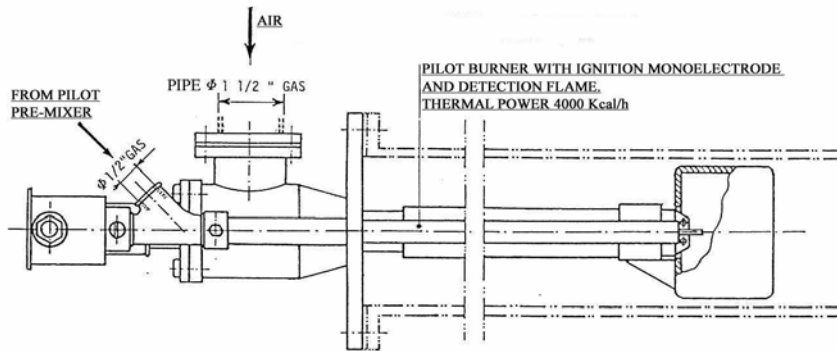
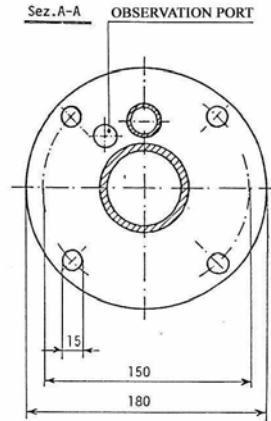
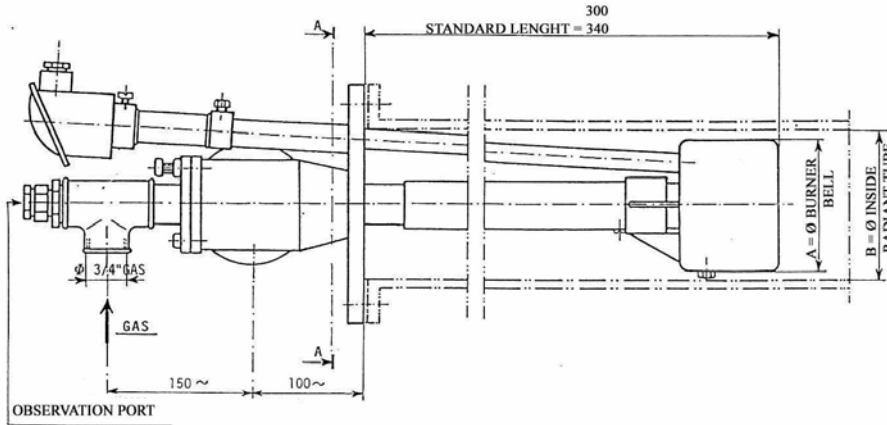
GAS BURNERS AND COMPONENTS FOR COMBUSTION SYSTEMS

Via P.M. Ferrè, 14 -26013 CREMA (CR) Tel/Fax 0373-257594 web: www.fusarbassini.it e-mail: info@fusarbassini.it





Fusar Bassini Astorre e C. Snc TR-6 BURNER



A = Ø BURNER BELL	B = Ø INSIDE RADIANT TUBE
83	103-113
90	110-120
102	122-132
114	134-140

TR-6 BURNER	
THERMAL POWER MAX	50000 Kcal/h
COMBUSTION AIR PRESSURE	500 mm H2O
GAS PRESSURE	500 mm H2O
COMBUSTION GAS	Natural gas , LPG

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GAS BURNERS AND COMPONENTS FOR COMBUSTION SYSTEMS

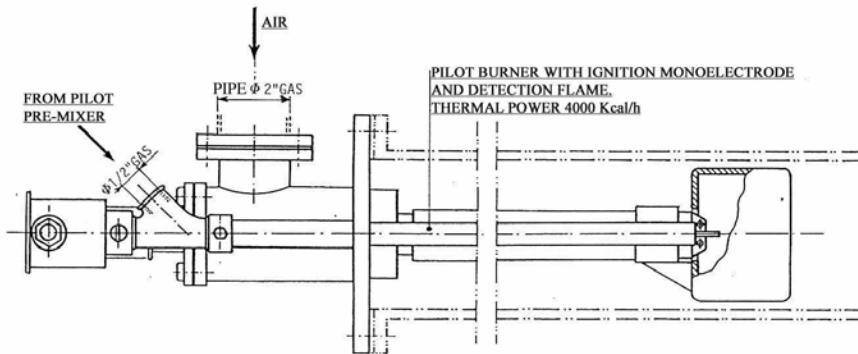
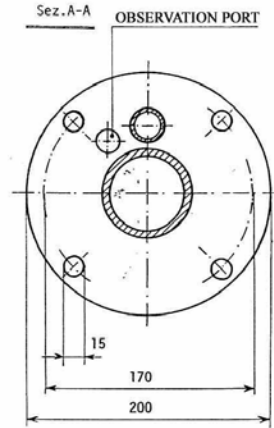
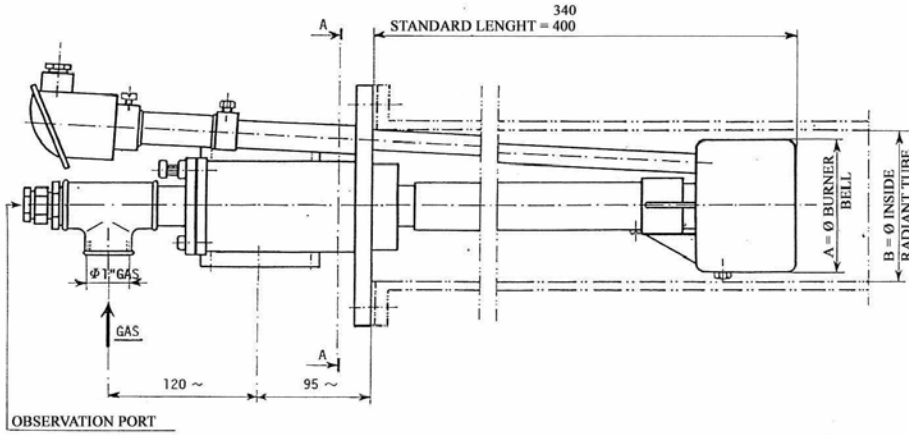
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TR-12 BURNER



A = Ø BURNER BELL	B = Ø INSIDE RADIANT TUBE
114	132-145
133	150-160

TR-12 BURNER	
THERMAL POWER MAX	100000 Kcal/h
COMBUSTION AIR PRESSURE	500 mm H ₂ O
GAS PRESSURE	500 mm H ₂ O
COMBUSTION GAS	Natural gas, LPG

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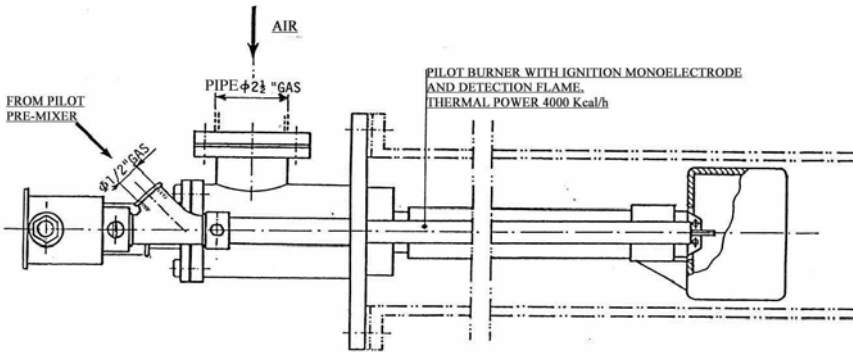
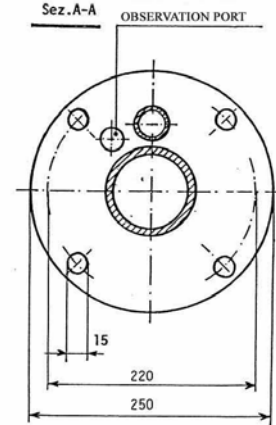
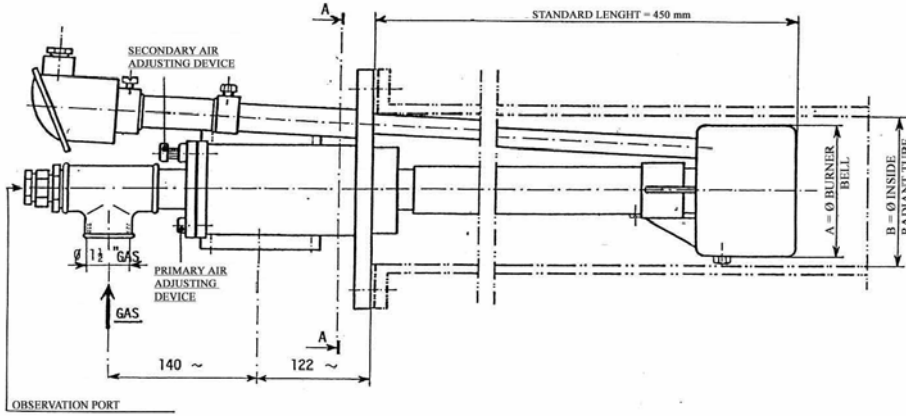
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Fusar Bassini Astorre e C. Snc TR-24 BURNER



A = Ø BURNER BELL	B = Ø INSIDE RADIANT TUBE
120	160 - 190
133	190 - 220
166	230 - 300

TR-24 BURNER	
THERMAL POWER MAX	200000 Kcal/h
COMBUSTION AIR PRESSURE	500 mm H ₂ O
GAS PRESSURE	500 mm H ₂ O
COMBUSTION GAS	Natural gas, LPG

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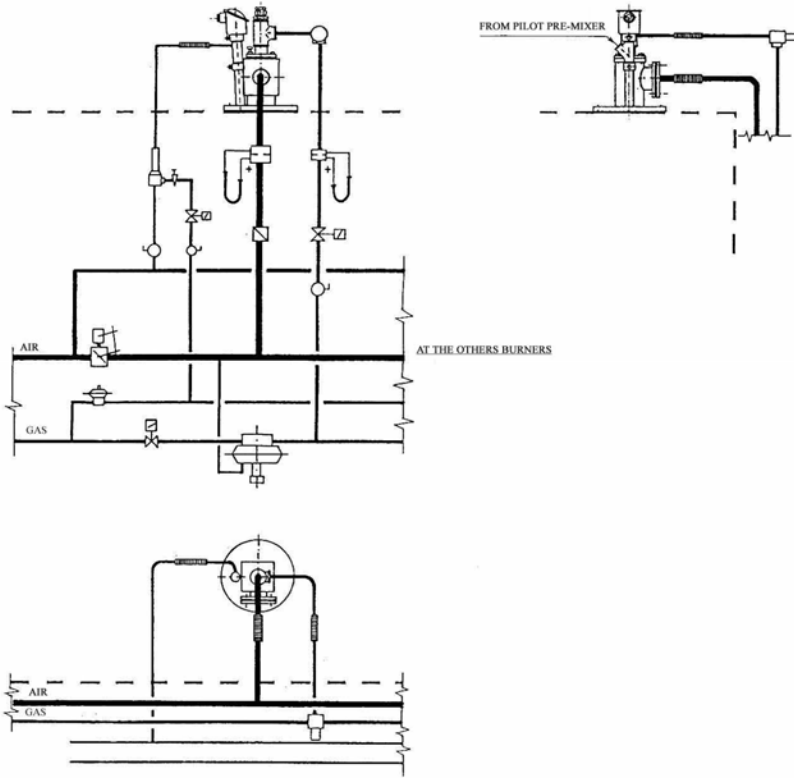




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PIPING FOR RADIANT TUBE BURNER

TYPICAL PIPING FOR RADIANT TUBE BURNER



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