





burner world.



















Flamtec is an innovative burner manufacturer based in Barcelona, Spain. We specialized on combustion solutions. Working with the most experienced team, Flamtec has a unique place in the

We produce burner according to sustainable environmental policies. More environmentally friendly and economical burner designs are our investment in our future.

The right choice of burner is not a sale technique, it is a sale principle for us. That's why, we propose always the most beneficial combustion solution for you.

Main Features

- » It can be used with natural gas, propane, biogas etc.
- » Suitable for water-tube boiler, ovens, dryer, diathermic oil generators etc.
- » Flame can be adjustable according to firing chamber
- » Combustion head, fan, control panel, gas train can be selected according to specific circumstances.
- » Modulation ration is 1/5 and it is really advantageous according to its competitors.
- » For multiple burner-boiler installation, special type of sensor is used.
- » Offers the possibility to heat and use of combustion air and provides an energy saving by increasing the combustion performance through the air economizer using in the system.
- » Provides the flame control between minimum and maximum capacities.
- » Has a feature of compatible running in different firing chambers.
- » Minimizes the amount of the gas emission especially nitrous oxide (NOx) gas by achieving an optimum air fuel mixture thanks to the special design mixer group.
- » By way of the compact dimensions provides an easy mounting and running conditions in narrow areas.
- » Due to the high-pressured fan, it has a feature of working productive opposing the flue and high firing chamber.
- » Easy to assemble the gas train to the burner
- » Standard protection is IP 54 mechanic parts.
- » If it is requested, IP 65 is possible as protection standard.
- » Internal or external Flue Gas Recirculation is available to decrease NOx emissions
- » All wiring, burner management system and electrical supply are included.

Conformity with directives as below

- 89/336 (2004/108) EEC
- 73/23/EEC
- 98/37/EEC
- 90/396/EEC
- EN 676

OPTIONS

- » O2 Trim control to provide extra efficiency.
- » CO Trim control to promote sensitive control system
- » Variable Speed Drive (Inverter) to prolong the product life
- » IP 65 Protection Class for special project
- » Internal or External Flue Gas Recirculation for low emission rules
- » Dungs VPS 504 Gas Leakage Control
- » Premix head can be selected as Low NOx Burner
- » Simultaneous firing
- » Soundproof fan



Lower emission levels

improve operating efficiency

Easy serviceability and maintenance

Technical Features

| Туре | | | Сар | Power | Motor | GAS INPUT | | | |
|-----------|-----|-----------|-------------|--------------|-------|---------------|-----------------|------|-----------------|
| | | w -max | kca min- | ıl/h ·max | | ı3/h ı-max | Supply | Kw | RESSURE mbar |
| SC 1.1 GZ | 18 | 120 | 15.480 | 103.200 | 1,88 | 12,51 | 1N - 50 Hz 230V | 0,15 | 100-300 |
| SC 1.2 GZ | 50 | 180 | 43.000 | 154.000 | 5,21 | 18,76 | 1N - 50 Hz 230V | 0,15 | 100-300 |
| SC 2.1 GZ | 80 | 280 | 68.800 | 240.800 | 8,34 | 29,19 | 1N - 50 Hz 230V | 0,25 | 100-300 |
| SC 2.2 GZ | 100 | 360 | 86.000 | 309.600 | 10,42 | 37,53 | 1N - 50 Hz 230V | 0,25 | 100-300 |

Heating values of gaseous fuels

| | | LOWER HEATING VALUE | | | | | |
|-------------|------------------|---------------------|--------|--------------|------------|--|--|
| Fuel | Density Kg/m³ | MJ/kg | MJ/m³n | Kcal/ m³n | Kw/ m³n | | |
| G20 Nat gas | - | - | 35.58 | 8500 | 9.68 | | |
| Propano | 2.02 | 45.98 | 92.88 | 22188 | 25.80 | | |
| Butano | 2.71 | 45.70 | 123.84 | 29585 | 34.40 | | |

Conversion of calorific values

1 kcal/kg = 4.186 kJ/kg 1 kWh/kg = 3600 kJ/kg 1 kcal/kg = 0.001163 kWh/kg

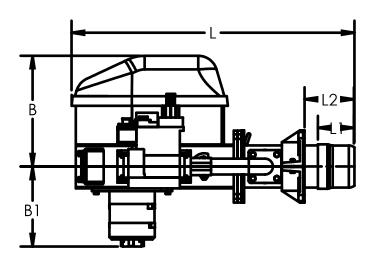
| Туре | Protection Level | Ignition Transformer | | | |
|-----------|---------------------|-------------------------|--|--|--|
| SC 1.1 GZ | IP 40 | 2X7,5 kW | | | |
| SC 1.2 GZ | IP 40 | 2x7,5 kW | | | |
| SC 2.1 GZ | IP 40 | 2x7,5 kW | | | |
| SC 2.2 GZ | IP 40 | 2x7,5 kW | | | |

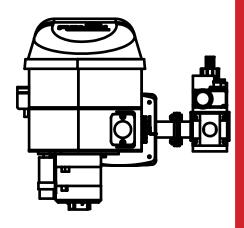
Did You Know?

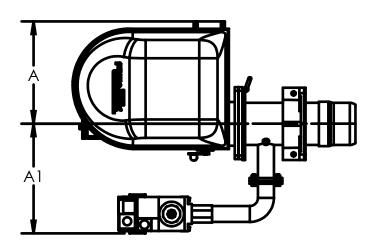
Standard air density 1.293 Kg/m3 refers to 0°C and 1013 mbar Reference conditions: Air Temperature 20 °C Pressure 1013.5 mbar Altitude 0m a.s.l

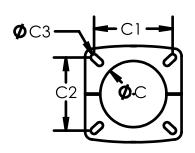


Dimensions









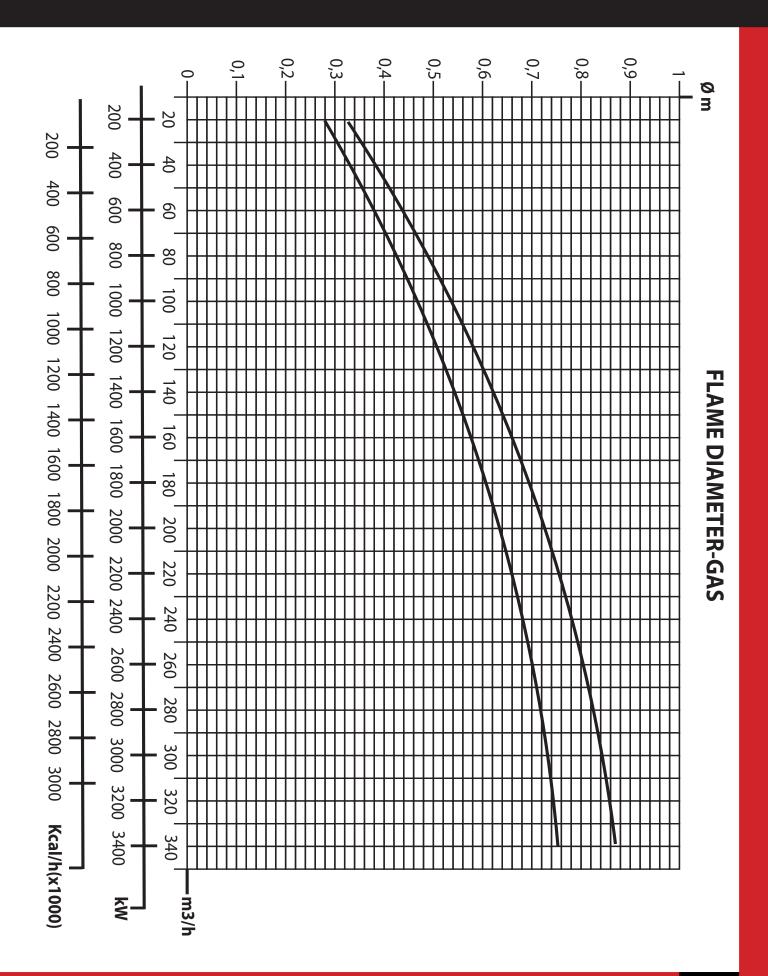
| | А | A1 | В | B1 | ØС | C1 | C2 | ØC3 | L | L1 | L2 |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|
| SC 1.1 GZ | 220 | 235 | 235 | 170 | 90 | 110 | 104 | М6 | 620 | 77,5 | 120 |
| SC 1.2 GZ | 220 | 235 | 235 | 170 | 90 | 110 | 104 | М6 | 620 | 77,5 | 120 |
| SC 2.1 GZ | 220 | 250 | 235 | 170 | 114 | 130 | 125 | M8 | 660 | 110 | 190 |
| SC 2.2 GZ | 250 | 320 | 290 | 185 | 114 | 130 | 125 | M8 | 735 | 110 | 190 |

Image





Flame Diameter (Gas)





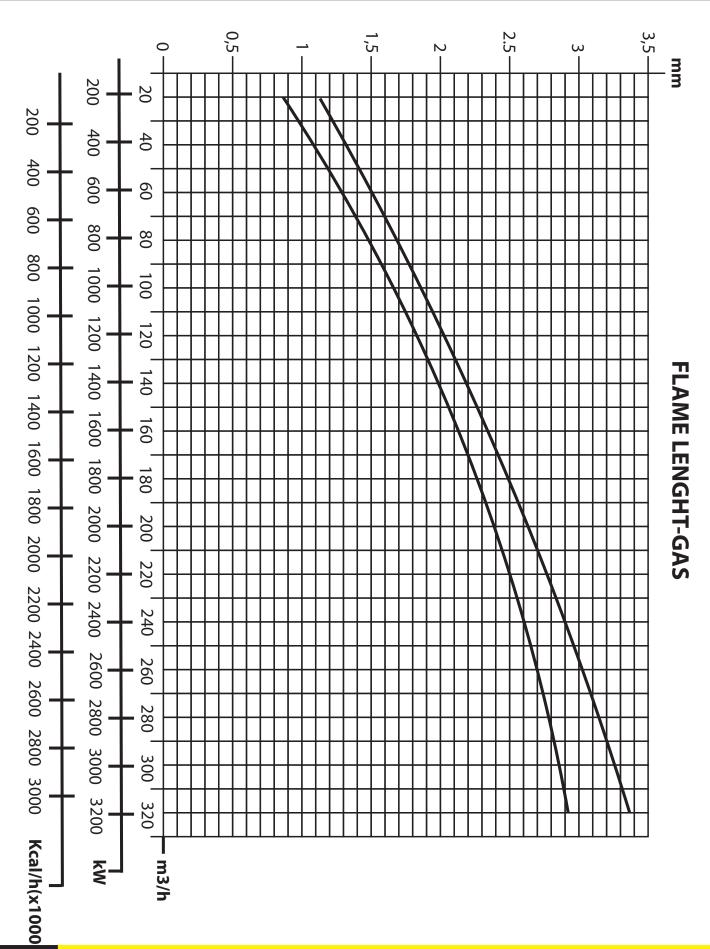
The most modern designs are the invesment on our future. Compact and aesthetic desings satisfy elaborative customers.

■ U4

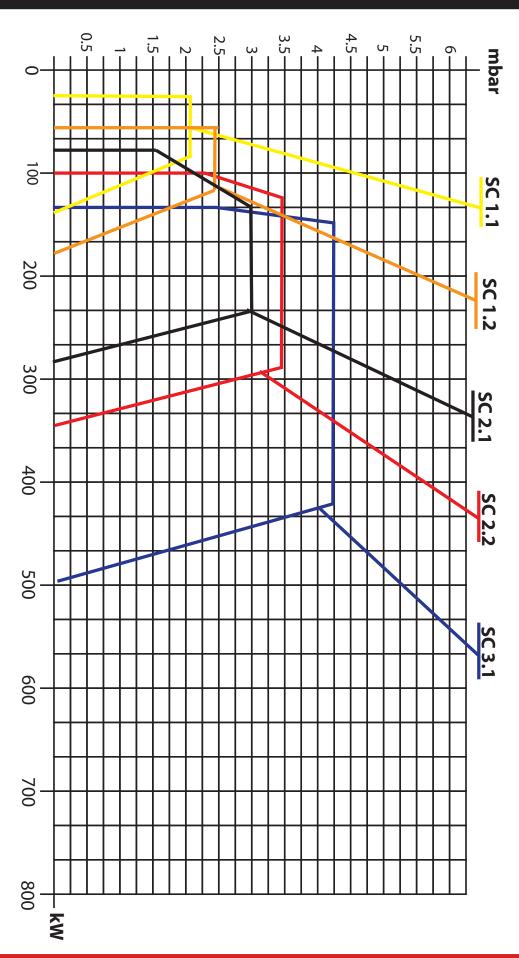
03

Our burner works quietly and provide a tranquil athmosphere for users.

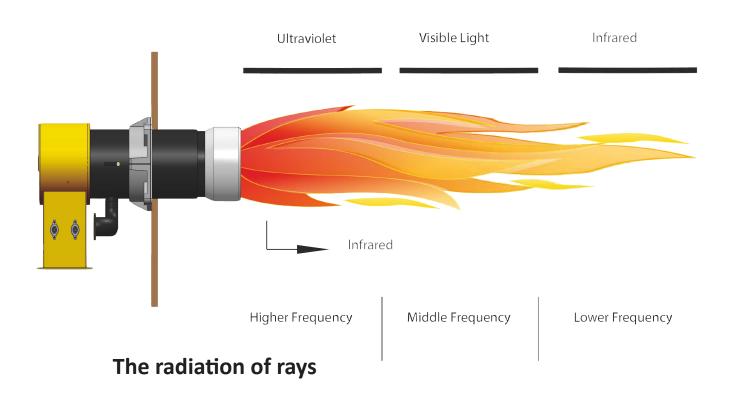
Flame Lenght (Gas)

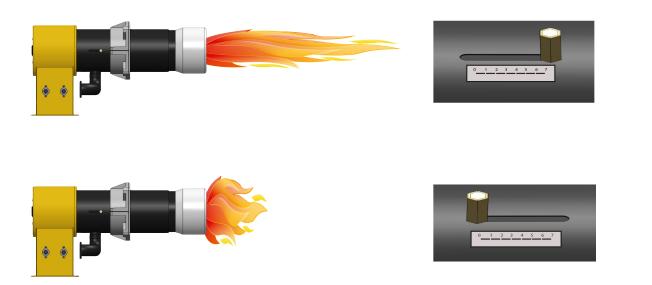


Capacitive Diagrams



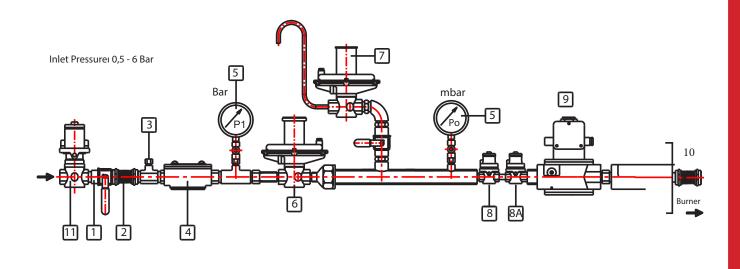
Flame Specifications



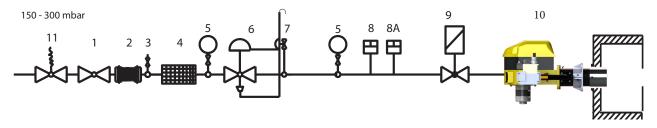


The arrangement of the shape of the flame

Gas Trains



Operating gas pinlet pressure



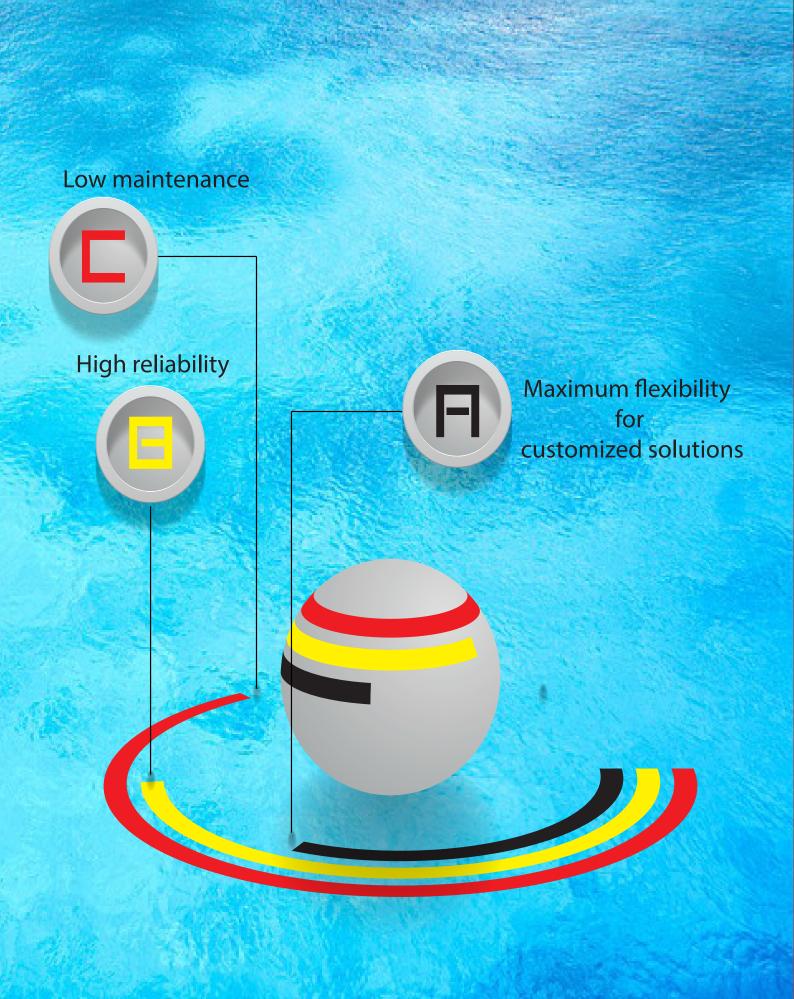
- 1-Ball Valve
- 2-Compensator
- 3-Testing nipple
- 4-Gas filter
- 5-Monometer (with tap)
- **6-Gas Pressure regulator**
- 7-Relief Valve

- 8-MIN Gas pressure switch
- 8A-MAX.Gas pressure switch
- 9-Multiblock valve
- 10-Burner
- 11-Firing valve

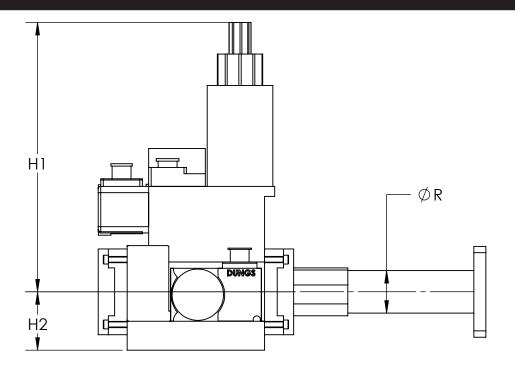
1 No need to additional control
2 Less Workforce

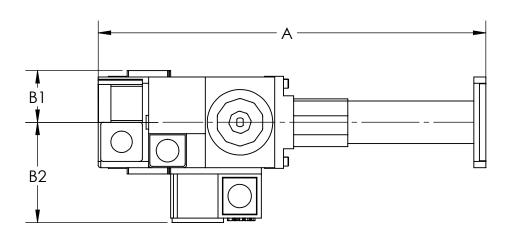
3 Easy commissioning

4 Easy maintenance



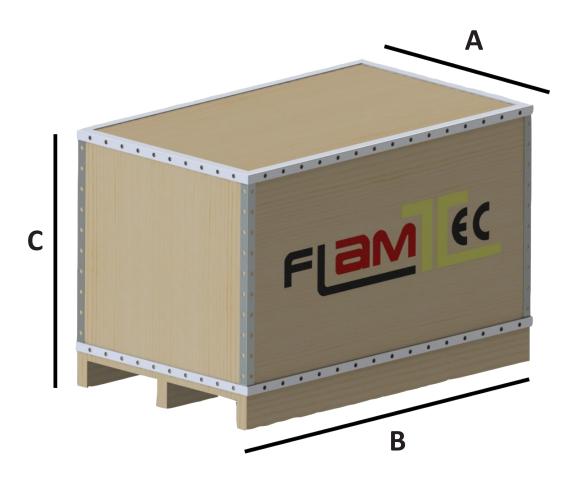
Gas Trains Dimensiosns





| | ØR | H1 | H2 | А | B1 | B2 |
|-----------|----|-----|----|-----|----|----|
| SC 1.1 GZ | 27 | 215 | 50 | 250 | 40 | 85 |
| SC 1.2 GZ | 27 | 215 | 50 | 250 | 40 | 85 |
| SC 2.1 GZ | 27 | 215 | 50 | 250 | 40 | 85 |
| SC 2.2 GZ | 27 | 215 | 50 | 250 | 40 | 85 |

Packing



| | Lenght(a) | Width(b) | Height(c) | Weight |
|-----------|-----------|----------|-----------|--------|
| SC 1.1 GZ | 46 cm | 68 cm | 51 cm | 37 kg |
| SC 1.2 GZ | 46 cm | 68 cm | 51 cm | 37 kg |
| SC 2.1 GZ | 46 cm | 73 cm | 53 cm | 37 kg |
| SC 2.2 GZ | 48 cm | 79 cm | 62 cm | 42 kg |

Technical Specifications

| | SC 1.1 | SC 1.2 | SC 2.1 | SC 2.2 |
|--|-----------|-----------|-----------|-----------|
| | GZ | GZ | GZ | GZ |
| Structural steel (ST-37) plate body | • | • | • | • |
| Upper cover | • | • | • | • |
| Suitable case for high temperature | • | • | • | • |
| Combustion head made from stainless stell withstand of 1150 °C | • | • | • | • |
| Gas filter | opt | opt | opt | opt |
| Flame screening window | • | • | • | • |
| Protection Level for mechanic | IP 54 | IP 54 | IP 54 | IP 54 |
| Protection Level for electric | IP 40 | IP 40 | IP 40 | IP 40 |
| Air damper | • | • | • | • |
| Ionisotion flame detecter | • | • | • | • |
| Adjustable gas nozzles | • | • | • | • |
| Burner flange gasket | • | • | • | • |
| Instruction manual | • | • | • | • |
| On-Off Button | х | Х | • | • |
| Work Lamp | Х | х | • | • |
| Block Reset | Х | х | • | • |
| Gas pipe | • | • | • | • |
| Nozzle holder | • | • | • | • |
| Turbulator | • | • | • | • |
| Gas Nozzle | 4 | 4 | 4 | 4 |
| Dungs LGW 3A 2 Air Pressure Switch | • | • | • | • |
| 2x7,5 kw Transformer | • | • | • | • |
| Dungs GW 150 A5 Min Gas Pressure Switch | • | • | • | • |
| Dungs GW 500 A5 Max Gas Pressure Switch | • | • | • | • |
| Siemens Lme 22.331.C2 Controller | • | • | • | • |
| Bearing | 2 | 2 | 2 | 2 |
| Cable Tube | • | • | • | • |
| Ignition electrode | • | • | • | • |
| Siemens Servomotor | • | • | • | • |
| Electric Motor | • | • | • | • |
| Fan | • | • | • | • |
| Gasket | • | • | • | • |

Exploded Drawing

