fives

ITAS Ductflame

Modular duct burners: F/L/R model for high temperature applications

Plug and play solutions to reduce commissioning time

Features

- Applications: ovens, dryers, and fume incinerators
- From 100kW to 30 MW
- ITAS Ductflame may be combined with other equipment in order to adapt to installation structure and to supply variable powers

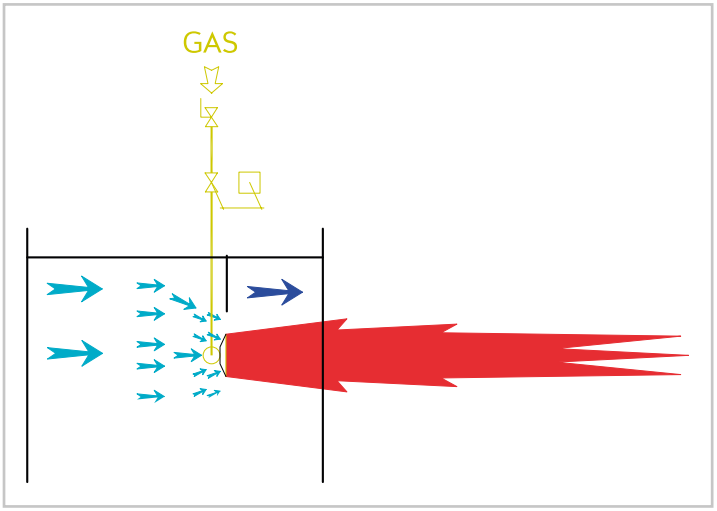
ITAS Ductflame burners are characterized by mixture formation on flame head. Combustion air is sent into the burner by a ventilator or directly to the process stream.

Air and fuel gas mixing is controlled in order to optimize both emission and efficiency; moreover, mixing takes place on nozzle outlets, thus avoiding any back firing.

ITAS DUCTFLAME: MODEL F

TYPES OF APPLICATIONS

- Designed for applications requiring the production of large warm and clean air masses
- All installations, where process air (such as fumes from gas turbine) may be used as combustion air, for example, atomizing burners for ceramics and steam-producing heaters
- Each burner will be designed according to the process condition, depending on special application



Process/Combustion air	
Max. inlet temp.	750 °C
Min. O_2	11 % at 600 °C
Air excess	20-25 %
Max. outlet temp.	1,200 °C
Fuel	
Natural gas	
LPG	
Other gas types upon request	
Emission	
CO < 70 ppm @3%O_2	
NOx < 80 ppm @3%O_2	

Nominal capacity each module (kw)	Turndown	Differential pressure natural gas at burner inlet (mbar)	Max differential process air pressure (mbar)	Flame length (mm)
300	1:10	380	5	3

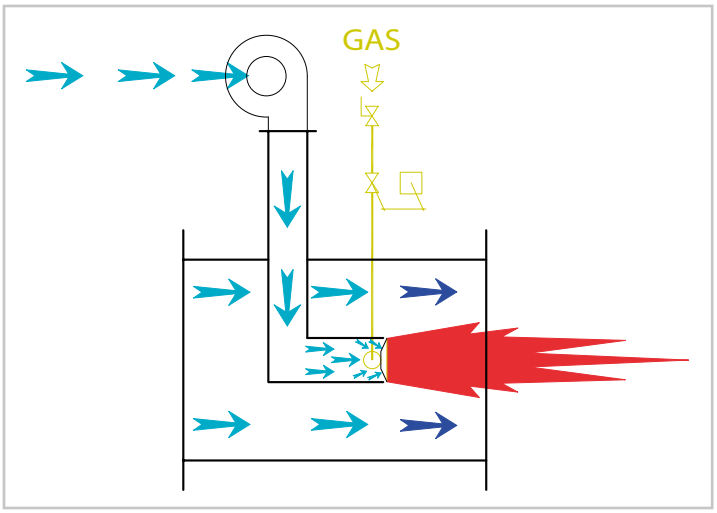
Higher turndown ratio can be reached with a burner staging.

ITAS DUCTFLAME: MODEL L

TYPES OF APPLICATIONS

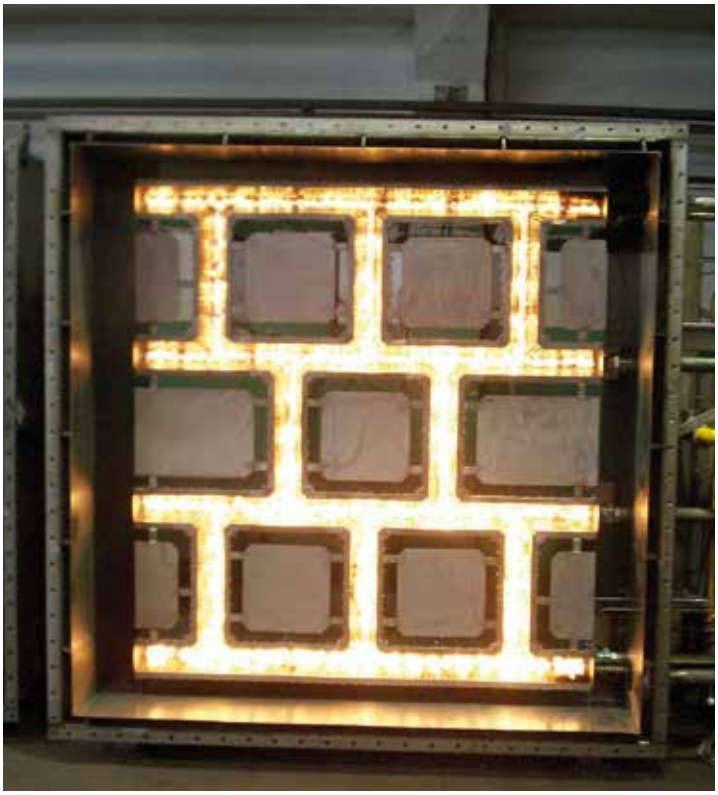
— All installations, where the objective is to obtain air recovery, by introducing a minimum of fresh air quantity, like air recovery from oven

— Each burner will be designed according to the process condition, depending on special application



OPERATING CONDITIONS

Combustion air	
Max. inlet temp.	300 °C
Min. O_2	20 %
Air excess	-50 %
Process air	
Max. inlet temp.	750 °C
Min. O_2	> 10 %
Max. outlet temp.	1,200 °C
Fuel	
Natural gas	
LPG	
Other gas types upon request	
Emission	
CO < 450 ppm @3%O_2	
NOx < 100 ppm @3%O_2	



Nominal capacity each module (kw)	Turndown	Differential pressure natural gas at burner inlet (mbar)	Differential combustion air pressure (mbar)	Flame length (mm)
300	1:10	380	30	3

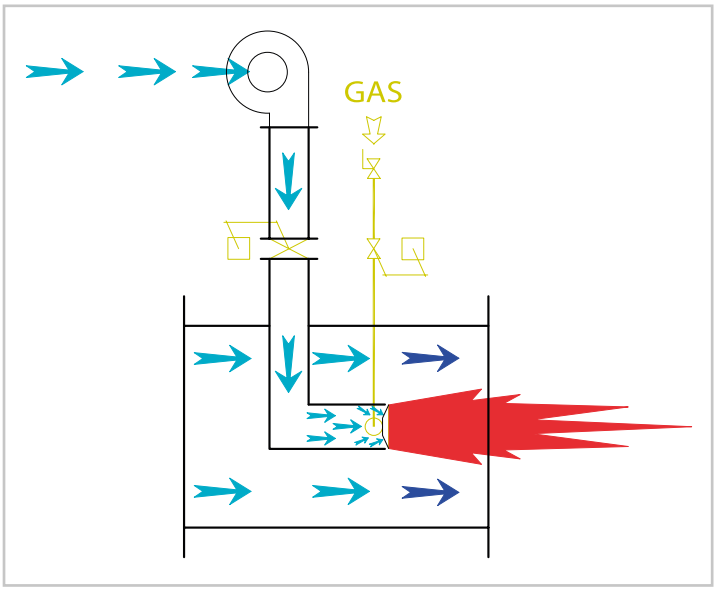
Higher turndown ratio can be reached with a burner staging.

ITAS DUCTFLAME: MODEL R

TYPES OF APPLICATIONS

— All processes, where combustion air quantity shall be as low as possible and controllable like high efficiency hoods in paper industry market

— Each burner will be designed according to the process condition, depending on special application



OPERATING CONDITIONS

Combustion air	
Max. inlet temp.	300 °C
Min. O_2	20 %
Air excess	20 %
Process air	
Max. inlet temp.	750 °C
Min. O_2	> 10 %
Max. outlet temp.	1,200 °C
Fuel	
Natural gas	
LPG	
Other gas types upon request	
Emission	
CO < 50 ppm @3%O_2	
NOx < 100 ppm @3%O_2	

Nominal capacity each module (kw)	Turn down	Differential pressure natural gas at burner inlet (mbar)	Differential combustion air pressure (mbar)	Flame length (mm)
125	1:10	90	15	1.5

Higher turndown ratio can be reached with a burner staging.

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CONTACT US
Fives ITAS S.p.A.
Via Metauro 5 – 20900 MONZA MB – Italy
Tel.: +39 039 27331
Email: Itas.heatingsystems@fivesgroup.com – Website: www.fivesgroup.com