

# ITAS Ductflame

Modular duct burners: H/T/C model



Plug and play solutions to reduce commissioning time

## Features

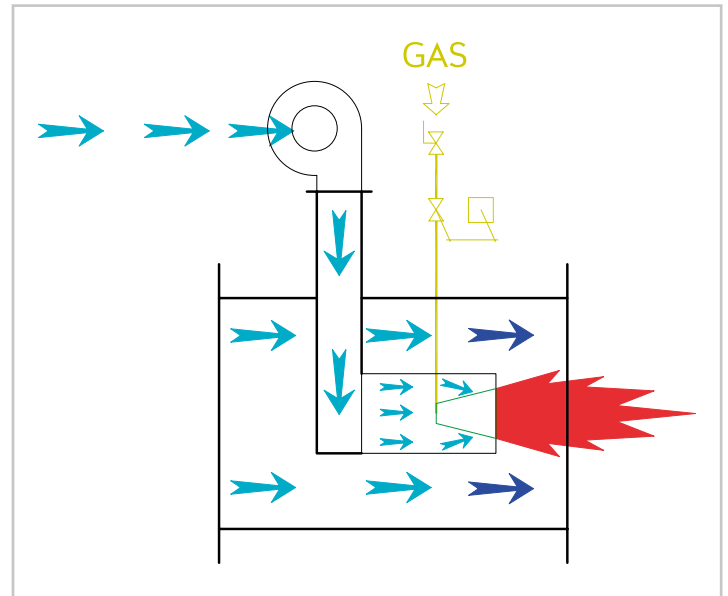
- Applications: ovens, dryers, and fume incinerators
- From 100kW to 30 MW
- ITAS Ductflame may be combined with other equipment in order to adapt to installation structure and to supply variable powers

# ITAS Ductflame burners are characterized by mixture formation on flame head. Combustion air is sent into the burner by ventilator.

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.

## TYPES OF APPLICATIONS

- Designed for applications requiring the production of large warm and clean air masses
- Especially used to produce uniform and clean hot air with a short flame in a duct integrated to the process flow of the main machine
- Possible applications are ovens, dryers, fume incinerators and all similar industrial installations
- When treated air is not constant and/or with low O<sub>2</sub> content, for example in dryers



## OPERATING CONDITIONS

Combustion air	
Max. inlet temp.	200 °C
Min. O <sub>2</sub>	20 %
Air excess	45-55%
Process air flow	
Max. inlet temp.	400 °C
Min. O <sub>2</sub>	0 %
Max. outlet temp.	800 °C

Fuel
Natural gas
LPG
Biogas
Other gas type upon request
Emission
CO < 80 ppm @3%O <sub>2</sub> from 80 and 100% of the capacity
NO <sub>x</sub> < 50 ppm @3%O <sub>2</sub> from 80 and 100% of the capacity

Nominal capacity each module (kw)	Turndown	Differential pressure natural gas at burner inlet (mbar)	Differential pressure LPG at burner inlet (mbar)	Differential pressure of combustion air with natural gas at burner inlet (mbar)	Differential pressure of combustion air with LPG at burner inlet (mbar)	Flame length (mm)
120	1:20	8,5	3	2,5	3	800

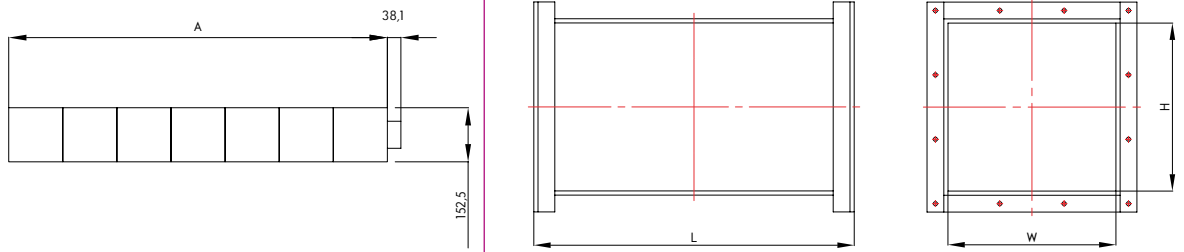
## OPTIONS

- ITAS Ductflame H may be arranged alone in horizontal or vertical line (see TAB. 1)
- ITAS Ductflame T may be arranged alone or in combination with ITAS Ductflame H in various horizontal or vertical lines (see TAB. 2)
- ITAS Ductflame C may be arranged alone or in combination with ITAS Ductflame H and/or ITAS Ductflame T in various horizontal or vertical lines. With these options we can reach a high capacity in a small combustion chamber

## DIMENSIONS

The most important dimensions for installation are referred in Table 1 for ITAS Ductflame H and in Table 2 for ITAS Ductflame T. Any other required capacity and/or ITAS Ductflame model C upon request.

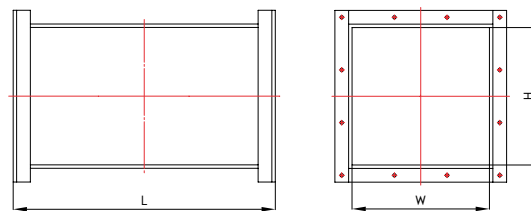
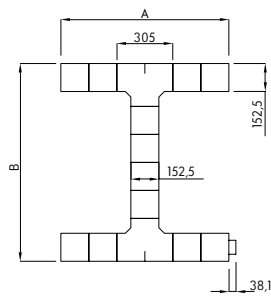
**Table 1 - Dimensions of modules and ducts - Power capacity - ITAS Ductflame H series**



Model	Module size	Power capacity (kW)	Minimum duct size		
			W	H	L
IT 151/H/1	A	120	400	400	1,050
IT 151/H/2	305	240	600	500	1,300
IT 151/H/3	457.5	360	750	500	1,300
IT 151/H/4	610	480	1,000	600	1,300
IT 151/H/5	762.5	600	1,100	600	1,300
IT 151/H/6	915	720	1,250	600	1,300
IT 151/H/7	1,067.5	840	1,350	600	1,300
IT 151/H/8	1,220	960	1,500	600	1,300
IT 151/H/9	1,372.5	1,080	1,650	600	1,300
IT 151/H/10	1,525	1,200	1,800	600	1,300
IT 151/H/11	1,677.5	1,320	2,000	600	1,300
IT 151/H/12	1,830	1,440	2,150	600	1,300
IT 151/H/13	1,982.5	1,560	2,300	600	1,300
IT 151/H/14	2,135	1,680	2,450	600	1,300
IT 151/H/15	2,287.5	1,800	2,600	600	1,300
IT 151/H/16	2,440	1,920	2,750	600	1,300
IT 151/H/17	2,592.5	2,040	2,900	600	1,300

Other dimensions/power capacities upon request

**Table 2 - Dimensions of modules and ducts - Power capacity - ITAS Duciflame T series**



Model	Module size		Power capacity (kW)	Minimum duct size		
	A	B		W	H	L
IT 151/T/6	305	467	720	600	750	1,050
IT 151/T/7	305	619.5	840	600	1,000	1,300
IT 151/T/8	305	772	960	600	1,250	1,300
IT 151/T/9	305	924.5	1,080	600	1,250	1,300
IT 151/T/10	610	467	1,200	1,000	750	1,050
IT 151/T/11	610	619.5	1,320	1,000	1,000	1,050
IT 151/T/12	610	772	1,440	1,000	1,250	1,300
IT 151/T/13	610	924.5	1,560	1,000	1,250	1,300
IT 151/T/14	915	467	1,680	1,250	750	1,300
IT 151/T/15	915	619.5	1,800	1,250	1,000	1,300
IT 151/T/16	915	772	1,920	1,250	1,250	1,300
IT 151/T/17	915	924.5	2,040	1,250	1,250	1,300
IT 151/T/18	915	1,027	2,160	1,250	1,500	1,300
IT 151/T/19	1,220	619.5	2,280	1,500	1,000	1,300
IT 151/T/20	1,220	772	2,400	1,500	1,250	1,300
IT 151/T/21	1,220	924.5	2,520	1,500	1,250	1,300
IT 151/T/22	1,220	1,077	2,640	1,500	1,500	1,300
IT 151/T/24	1,220	772	2,880	1,500	1,250	1,550
IT 151/T/26	1,220	924.5	3,120	1,500	1,250	1,550
IT 151/T/30	1,220	1,229.5	3,600	1,500	1,500	1,550
IT 151/T/32	1,372.5	1,229.5	3,840	1,750	1,500	1,550
IT 151/T/36	1,677.5	1,229.5	4,320	2,000	1,500	1,550
IT 151/T/41	1,525	1,229.5	4,920	2,000	1,500	1,550
IT 151/T/45	1,830	1,229.5	5,400	2,250	1,500	1,550
IT 151/T/50	1,982.5	772	6,000	2,250	1,250	1,550
IT 151/T/56	1,830	1,391.5	6,720	2,250	1,750	1,550
IT 151/T/61	1,525	1,553.5	7,320	2,000	2,000	1,550
IT 151/T/64	1,525	1,706	7,680			
IT 151/T/72	1,830	1,553.5	8,640			
IT 151/T/80	1,830	2,013.25	9,600			

Other dimensions/power capacities upon request