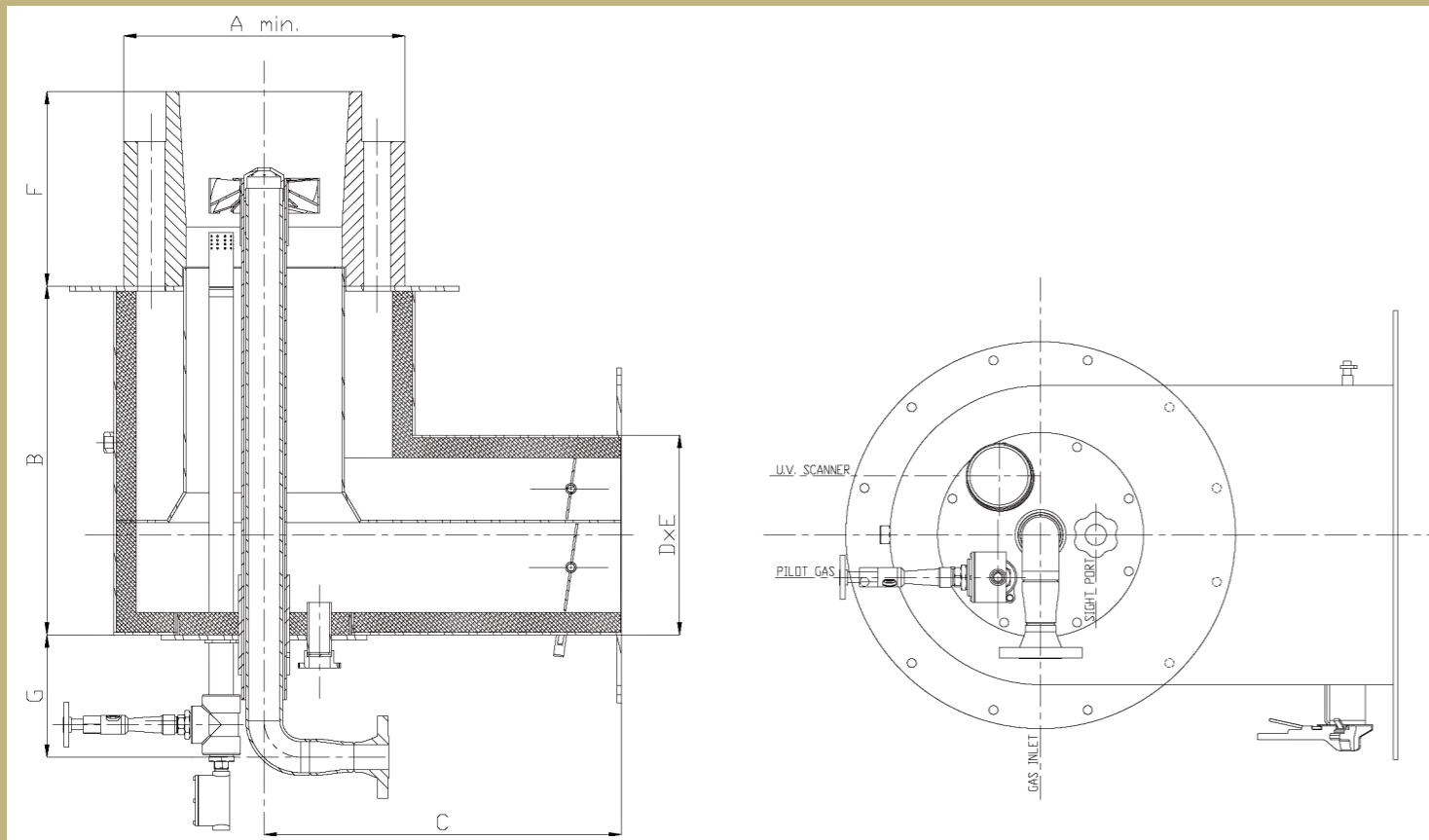


Air staging forced draft gas burner



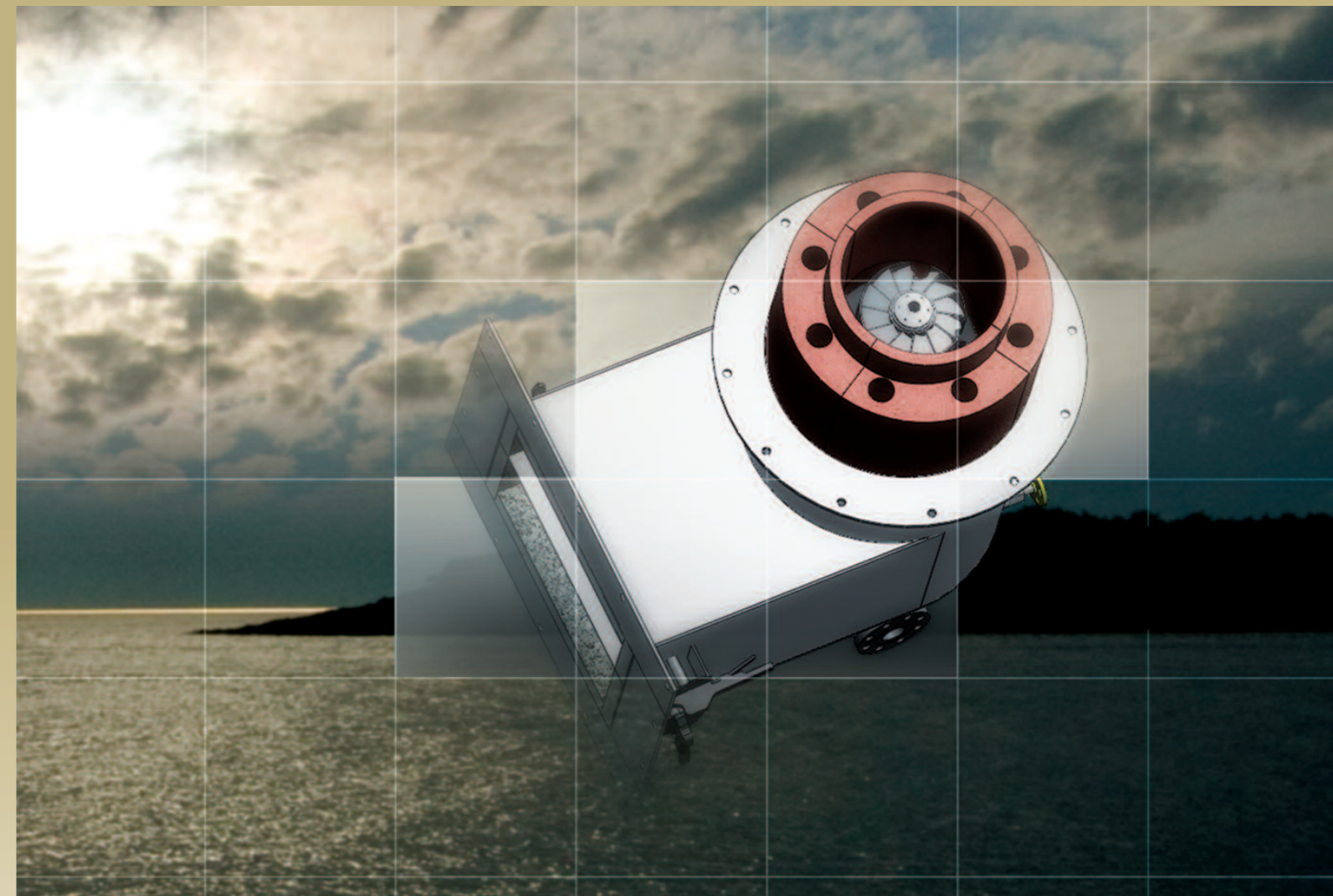
burner main dimensions¹

Burner Size MW	DIM A (dia.)	DIM B	DIM C	DIM D	DIM E	DIM F	DIM G
0,5	600	700	600	350	400	300	300
0,8	600	700	600	350	400	300	300
1,2	700	800	700	450	500	300	300
1,8	700	800	700	450	500	300	300
2,6	700	800	700	450	500	300	300
3,8	800	900	800	500	600	300	300
5,7	800	900	800	500	600	300	300
8,8	800	1000	900	550	650	350	300

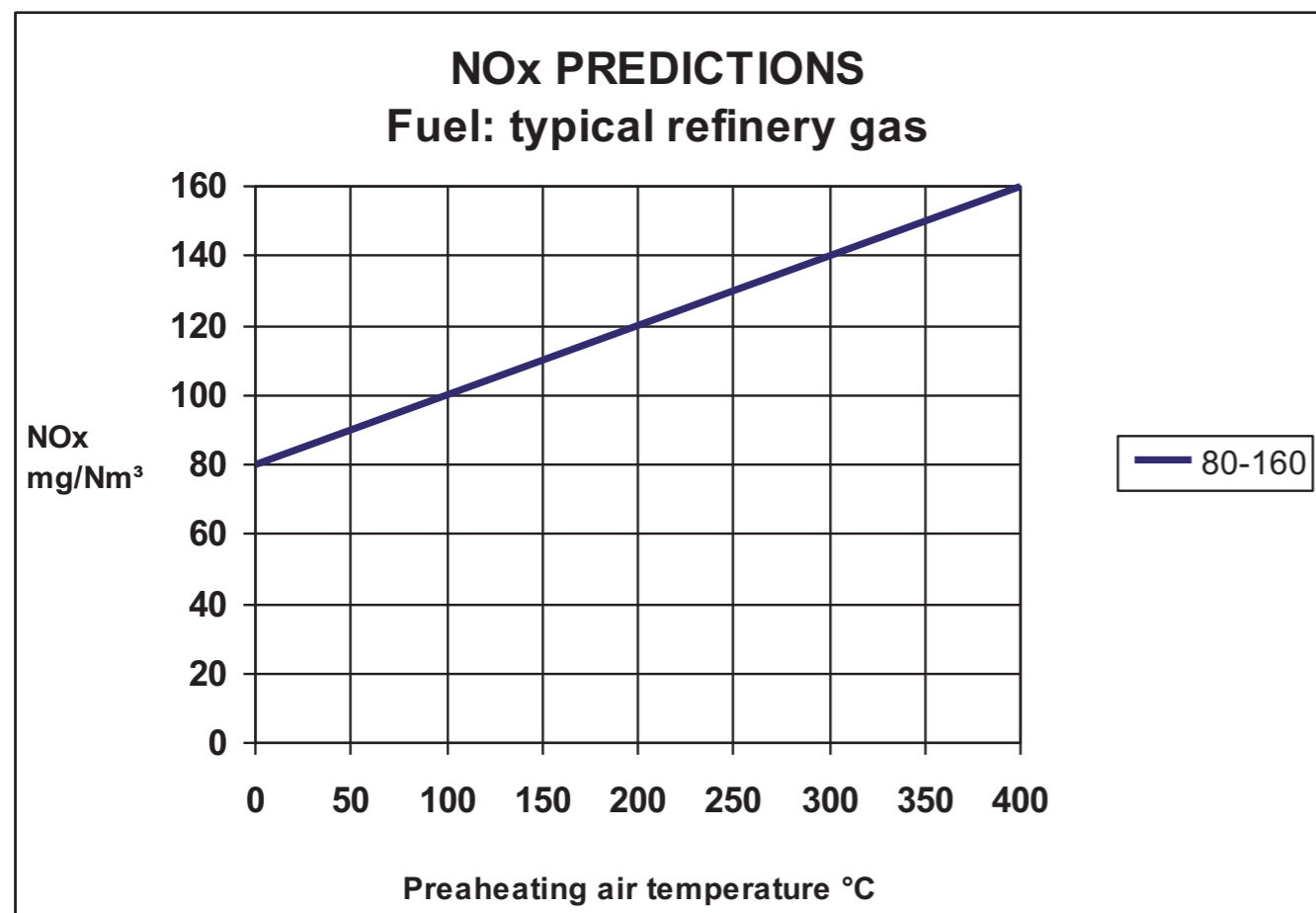
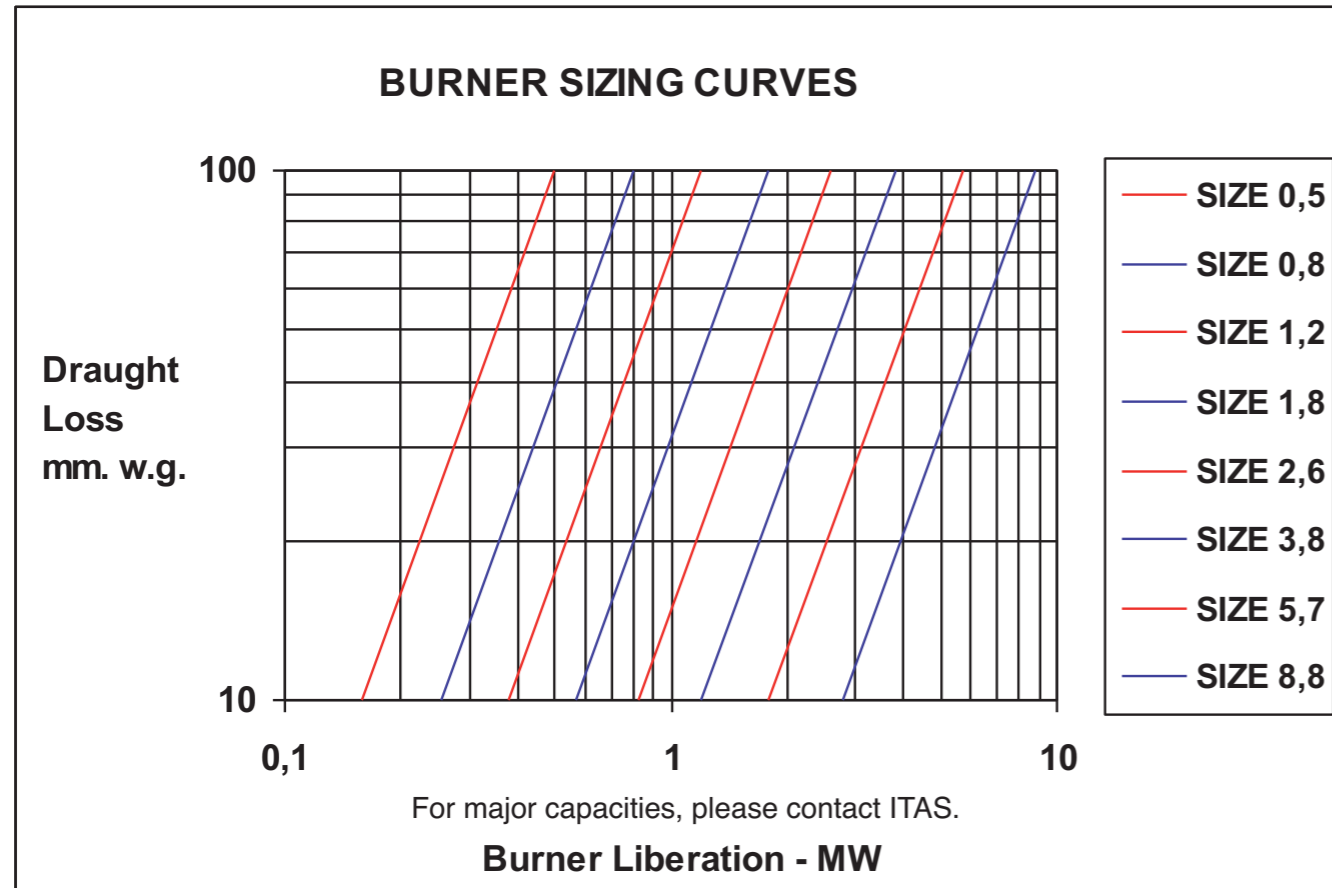
¹ Dimensions in case of order can be changed to suit design data. Dimensions are valid for ambient air temperature up to preheated air at 250°C and 100 mm WC air pressure.

E/P/B/R/F-FDG/0112/0

ITAS Air Staging Forced Draft Gas Burner mod. RF-FDG

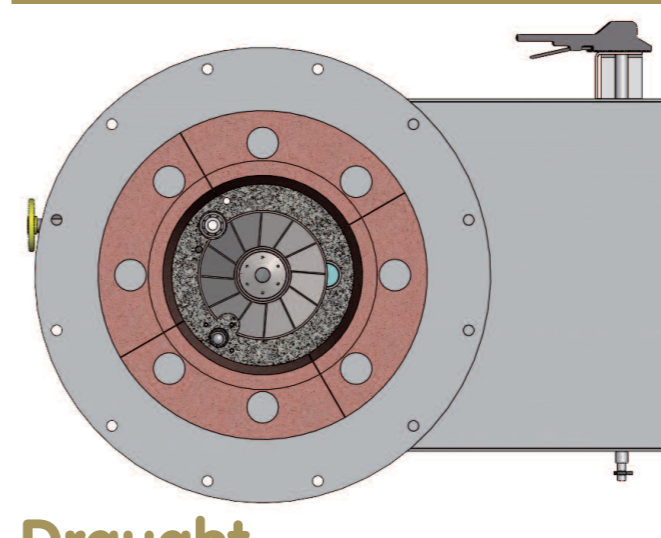


Air staging forced draft gas burner



Air staging forced draft gas burner

ITAS S.p.a. is an engineering company designing and supplying, amongst many other products, burners and accessories for combustion system as well as entire turn-key combustion plants.

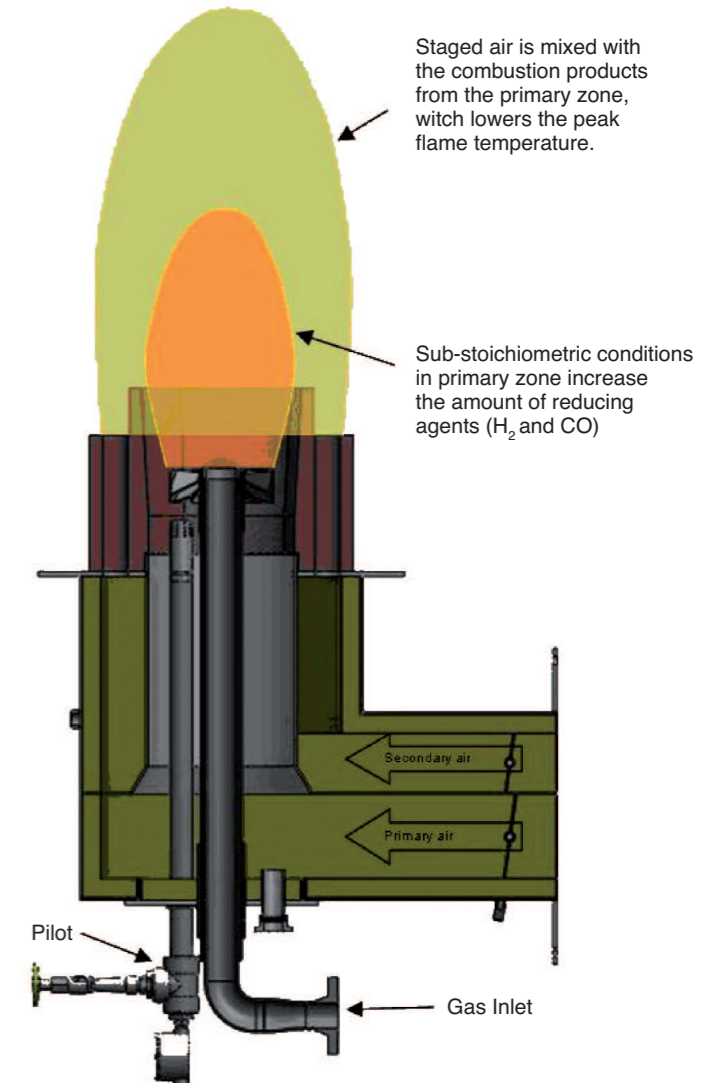
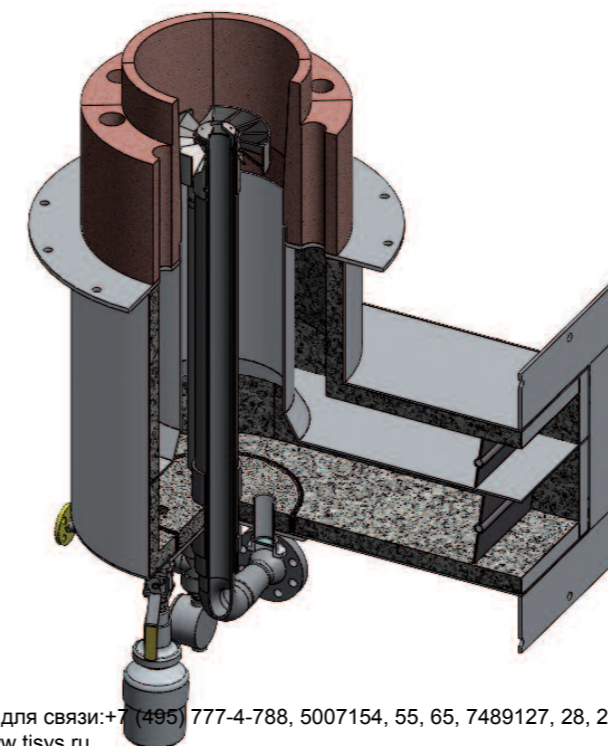


Draught

Draught is a measure of the energy available to drive the combustion air through the burner and mix it with the fuel.

In forced draught burners an applied energy source like a fan, is used to supply combustion air at pressures much higher than atmospheric. This allows greater energy to be used in mixing the combustion air with the fuel, more intense combustion is achieved, and generally smaller flames.

ITAS has a range of Forced Draught Burners using this technique. In the event that waste energy from the discharged gases or elsewhere is used to pre-heat the combustion air, this is accommodated within our forced draught burner range.



Air Staged combustion is an effective technique for lowering NOx. Staging means that some of the oxidizer is added downstream of the main combustion zone. In air staging, some of the combustion air is directed into the primary combustion zone, while the balance is directed into secondary and even tertiary zones in some cases.

This makes the primary zone fuel-rich, which is less conducive to NOx formation when makes primary zone fuel-pared to stoichiometric conditions. The unburned combustibles from the primary zone are then combusted in secondary and tertiary zones. While the overall stoichiometry may be the same as in a conventional burner, the peak flame temperature is much lower in the staged air case, because the combustion process is staged over some distance, while heat is simultaneously being released from the flame.

The lower temperatures in the staged air flame help reduce the NOx emissions. To be even closer to the needs of the customer, ITAS requires modifications to general standards. Air staging burners are available in the capacity range from 0,5 up to 9 MW. NOx emission is below 160 mg/Nm³ for any operating condition.