

SOLUTIONS FOR THE GLASS INDUSTRY





Oxy-fuel combustion systems are now a practical and well tested application for use in glass melting furnaces.

Glass Service has developed the technology and have supplied a number of complete oxy-fuel combustion systems to glass manufacturers.

Glass Service designs and supply oxy fuel burners for low pressure gas and oxygen and for low and high flow rates.

All Glass Service burner designs have low momentum flames without any peak temperature.

This special design feature for glass melting furnaces avoids localised high temperatures on the furnace crown and the potential to create rat holes.

The burner radiation is concentrated in the visible spectrum range improving the radiated energy transmission to the melted glass and the furnace efficiency.



OXY-GAS BURNEER



TECHNICAL FEATURES

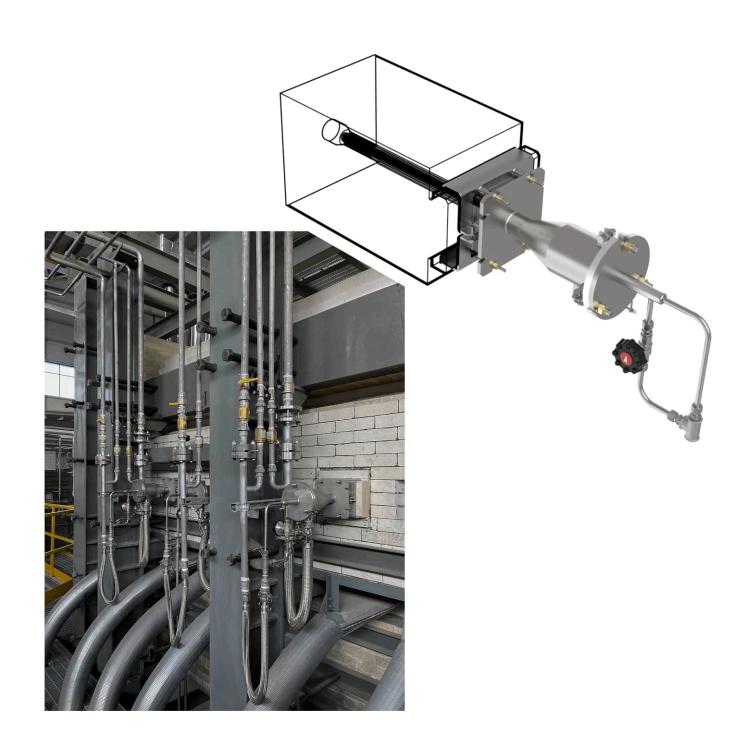
- Low momentum burners
- ❷ High flame radiation in visible spectrum
- Stepless external regulation of the flame length
- Easy removal of burners for maintenance



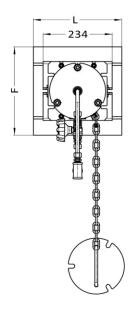


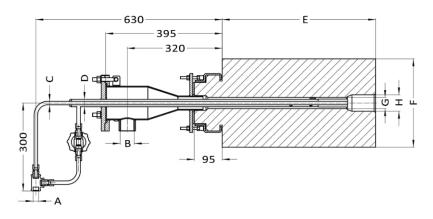
OPERATING PRINCIPALE

- Low flame momentum
- Easy removal for maintenance
- Compressed air cooling for burner shut off
- Burner block material AZS 31%





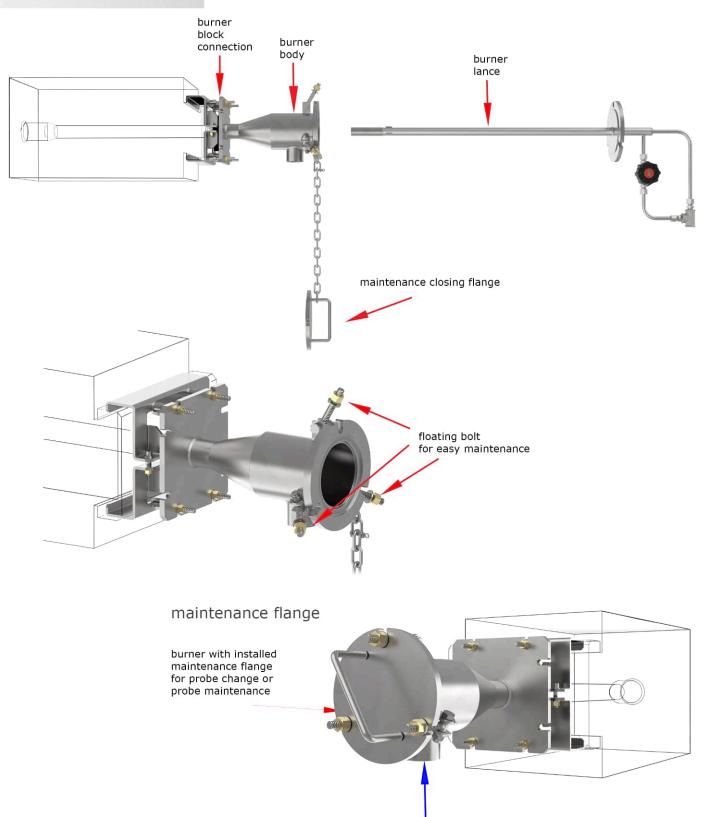




eature	Model		BR-0X 200	BR-OX 500
Power		kW	200	500
Range ability			1/3	1/3
Oxygen ratio range			2-3	2-3
Flame length		m	0,5 ÷ 2	0,5 ÷ 3
Furnace temperature		°C	1300 ÷ 1600	1300 ÷ 1600
Natural gas flow	min	Nm³/h	7	15
	max		20	50
Natural gas pressure large nozzle flow 100% little nozzle flow 0%		mbar	20	20
Natural gas pressure large nozzle flow 0% little nozzle flow 100%			60	100
Natural gas low calorific value		Kcal/Nm³	8500	
		kW/Nm³	10	
Natural gas density		kg/Nm³	0,71	
Oxygen pressure input		mbar	20	
Oxygen density		kg/Nm³	1,43	
Α			½" BSPP femal	1/2" BSPP femal
В			1" ½ BSPP femal	1" ½ BSPP femal
С	0010		12/9	14/11
D	OD x ID		25/20	30/26
E	standard		520	
	range	mm	230 ÷ 660	
F	standard		300	
	range		230 ÷ 400	
G			38	57
Н			56	86
L			300	



MAINTENANCE PROCESS



oygen inlet



CUSTOMERS WORLD WIDE



PRODUCTS AND SERVICES

turn key projects batch plants furnaces:

recuperative regenerative

gas fired

oil fired

oxy-fuel fired

mixed fuel

electric

forehearths:

colouring forehearths combustion systems

day tanks

mini melters

boosters

bubblers

metallic recuperators

batch chargers
stirring machines
glass level controls
frit dosing and transport
control cabinets
SCADA and DCS
cooling systems

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Services:

installation and supervision commissioning training preheating technology transfer assistance laboratory and analysis refractory consulting project financing