SAACKE

Energy and heat supply

Chemical industry

Food industry

Steel and metal production

Building materials industry

Wood processing

FUTURE-PROOF
NO$_x$
EMISSIONS

Low NO$_X$ burner for maximum availability and efficiency

Modular flexibility with unrivaled burner capacity up to 28 MW

The SAACKE TEMINOX GL burner combines all the benefits of a modern combustion plant. It is designed for industrial heat and steam generation. Its efficient and low-pollutant combustion complies with the most stringent NO$_X$ emissions requirements in place with a low CO and residual oxygen content in the exhaust gas. The burner is available in monoblock or duoblock design and for gas or light oil operation with burner capacities of up to 28 MW.

Plug and play with individual add-on options

This monoblock version has an integrated high-performance fan designed specifically for the burner, which, together with the energy efficient motors achieves outstanding efficiency and overcomes large flue gas-side draft losses. The compact TEMINOX GL is delivered ready for connection, and can be flexibly configured with the following options:

- use of special fuels
- integrated SAACKE se@vis control
- speed control
- O$_2$ control

All benefits at a glance

↘ Lowest emission values in accordance with or reliably below country-specific emission regulations, e.g. BImSchV (German Federal Ordinance on Exposure Control)

↘ High efficiency due to low residual oxygen in the exhaust gas, even under high emission requirements

↘ Extremely efficient, sound absorbing fan (monoblock) with low current consumption

↘ Complies with CE directives, type-tested

↘ Durable, modular design

↘ Straightforward mounting, commissioning and maintenance

↘ Suitable for various heat generators

↘ Available as a natural gas, light oil or dual fuel burner with the option of simultaneous operation of two fuels and combustion of special fuel gases

↘ Design for air preheating (optional)

↘ Integrated combustion management system (optional)

↘ Further modular system extensions possible (optional)

The SAACKE solution in detail

The sophisticated design of the mixing system, the variability in the nozzle geometry and the adjustable stabilizing plate ensure a high control range and the lowest NO_x emissions in gas and oil operation. The standard design is equipped with an electronic fuel-air compound control. A SAACKE UV flame sensor is provided for flame detection, which monitors a wider frequency spectrum and as a result has a higher operational reliability. The integrated sound absorbing system ensures quiet operation in compliance with the relevant sound insulation regulations.

Conclusion

Minimum emissions with maximum efficiency and reliability – the TEMINOX GL ensures the maximum availability of various heat generators and at every output level. The standardized burner impresses with its special flexibility with respect to fuel use and equipment. The simple mounting, commissioning and maintenance reduces downtimes – such as when upgrading boiler plants – to a minimum. This makes the SAACKE burner "Made in Germany" an attractive solution with respect to technology as well as cost effectiveness for environmentally conscious customers.

Technical data: TEMINOX GL

Applications	Shell boilers, water-tube boilers, thermal oil boilers, thermal process plants, new construction and modernization of industrial plants
Fuels	Natural gas, liquefied gas, light oil, special gases
Burner capacity (max.)	3-28 MW (gas and oil operation)
Control ranges	Up to 1:10 (gas operation) Up to 1:4 (oil operation) Depending on the construction size and equipment/control concept
Emissions*	25-100 mg/Nm³ (NO_x in gas operation), 120-200 mg/Nm³ (NO_x in oil operation), < 10 mg/Nm³ (CO in gas operation), < 40 mg/Nm³ (CO in oil operation)

* Depending on the medium temperature, furnace geometry, combustion air temperature, equipment and based on 3% O_2 in dry exhaust gas. Additional NO_x-reducing measures are possible or required depending on the application.

Capacity range of the monoblock/duoblock burner in MW

Size	Gas		Light oil	
	$\dot{Q}min$	$\dot{Q}max$	$\dot{Q}min$	$\dot{Q}max$
50*	0.5	5	1.3	5
70	0.7	7	1.7	7
100	1.0	10	2.4	10
140	1.4	14	3.3	14
200	1.8	20	4.7	20
280	2.5	28	6.8	28

* Only available as monoblock version.

TEMINOX GL in use on a flame-tube and a double flame-tube boiler