

Modular all-rounder

DDZG Series: A flexible concept in burners for the lowest possible NO_X emissions and low operating costs

As an innovative development in the domain of steam-assisted pressure jets, the DDZG from SAACKE heralds the start of a new generation of burners. The secret lies mainly in the modular assembly system, from which various burner types can be readily configured. This makes the DDZG extremely flexible and reduces effort and costs of modernizing individual boilers.

High levels of energy efficiency due to continuous development

Due to a new procedural concept and low losses of pressure electricity consumption of the fan is reduced, which lowers operating costs. The DDZG sets new standards with regard to environmental protection and consistently operates below stringent emission limits — even without secondary measures such as external recirculation of flue gases. High levels of energy efficiency, low maintenance costs and exceptional durability are the results of decades of continuous development. The DDZG thus offers flexibility and one thing above all: excellent quality, "Made by SAACKE".

Energy and heat supply

Chemical industry

Refineries

Food industry

Building materials industry

Steel and metal production

Waste incineration

Wood processing

Advantages at a glance

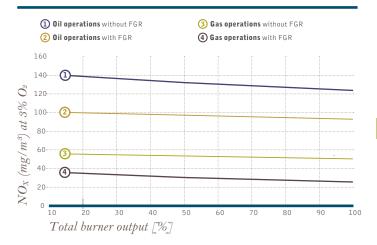
- ∠ Can be delivered for standard fuels and almost all gas and liquid special fuels
- → Short planning phase and customized engineering thanks to modular concepts
- ▶ Flexible burner concept: Simultaneous combustion of several gases, even in combination with different liquid fuels
- ☑ Ideal for water-tube boilers, thermal fluid boilers and process plants of varying sizes
- △ Air heating up to 300°C possible
- **∠** Extremely low emissions
- → High control range
- Neduced operating costs due to high-efficiency combustion technology and low auxiliary power requirement
- Less maintenance time and exceptionally long life
- → Conforms with European guidelines



Flexible construction method for tailored burner combinations

Whether it is the basic option, which offers excellent value for money, or a multiple fuel burner with several burner guns for more demanding tasks and variants with explosion protection, the DDZG series of burners offers a wide range of uses, high performance for the heart of your process furnace and surpasses the competition with unbeatably low emissions. Due to its compact size, the DDZG-EN is ideal for modernizing boiler plants, since the burner openings on the boiler can be kept as they are without additional bending of the boiler pipes. Furthermore, the DDZG-LN with its flexible burner concept allows combustion of gaseous and liquid standard fuels in different combinations and also as simultaneous co-firing.

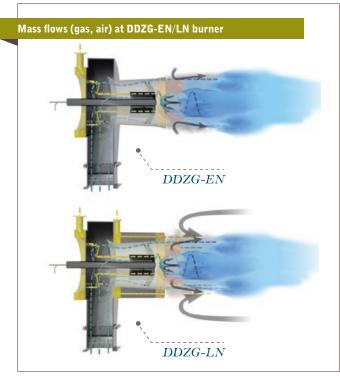
Achievable emission values with DDZG-LN burners in gas and oil operation at optimum conditions



Key technical data: DDZG

Applications	Water-tube boilers (up to 500 t/h), thermal oil heaters, combustion chambers, waste incineration plants, hot gas generators
Burner capacity (max.)	7-100 MW
Combustion air temperature	0-300 °C
Pressure loss air side	<25 mbar
Control range	1:7





Emission values*

		Natural gas	Light oil**	Heavy Fuel oil**
NO _x [mg/m³]	without secondary measures	50 -90	120 -140	<450
NO _x [mg/m³]	with secondary measures	40 -70 (with flue gas recirculation)	90 -120 (with flue gas recirculation)	<300 (with SNCR)

^{*} Based on 3 % 0 2, under ideal conditions the lower values apply ** In relation to 140 mg/kg fuel nitrogen *** Depending on fuel nitrogen content

