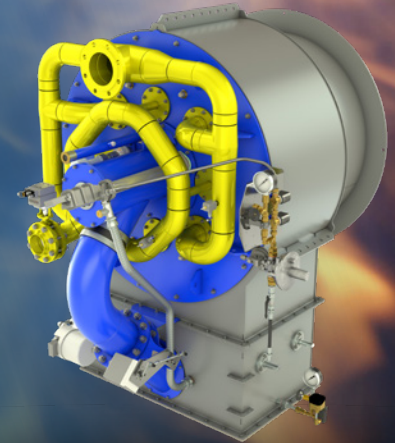


**SAACKE**



# ATONOX THE ULTRA-LOW NO<sub>x</sub> BURNER FOR YOUR LARGE COMBUSTION NEEDS.

- ✓ Future-proof with best available technology (BAT)
- ✓ Ideal for new construction or modernization
- ✓ Flexible burner concept thanks to modular design



# BURNER OVERVIEW.



Burner	ROTONOX	SSB	TEMINOX
<b>Burner capacity</b>	1–45.3 MW	1.5–90 MW	3–28 MW
<b>Fuels</b>	Natural gas, liquid gas, hydrogen, light fuel oil, heavy fuel oil, synthetic fuels, special fuels (biogases, bio-oils, animal fats, special gases, special oils, other alternative liquid and gaseous fuels)	Natural gas, liquid gas, hydrogen, light fuel oil, heavy fuel oil, synthetic fuels, special fuels (biogases, bio-oils, dust, lean gases, etc.)	Natural gas, liquid gas, hydrogen, light fuel oil, synthetic fuels, special fuels (biogases, bio-oils, etc.)
<b>Areas of application</b>	New construction and modernization of industrial plants: Shell boilers, water-tube boilers, thermal fluid heaters, thermal processing plants, hot gas generators, and combustion chambers	New construction and modernization of industrial plants: Shell boilers, water-tube boilers, thermal fluid heaters, thermal processing plants, hot gas generators and combustion chambers, other thermal processing and drying plants, ignition and support firing	New construction and modernization of industrial plants: Shell boilers, water-tube boilers, thermal fluid heaters, thermal processing plants

## Diagram



### ATONOX

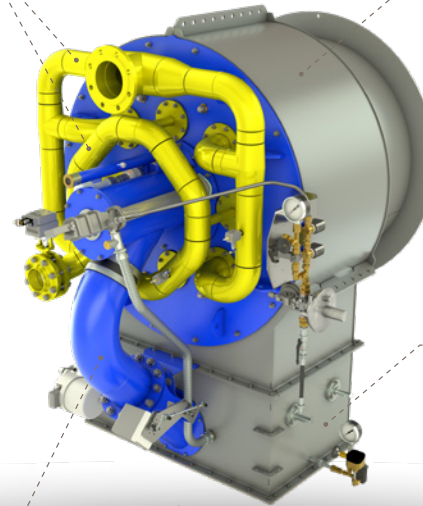
7–100 MW

Natural gas, liquid gas,  
hydrogen, light fuel oil,  
synthetic fuels, special fuels  
(biogases, bio-oils, etc.)

New construction and  
modernization of industrial  
plants: Water-tube boilers,  
thermal fluid heaters,  
thermal processing plants

Gasrings

Windbox



Modular  
damper frame

Primary air

Secondary air

# BENEFITS OF THE BURNER SYSTEM.

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The **SAACKE ATONOX** is already laying the foundations for an environment worth living in for future generations today with its excellent performance and innovative concepts. This is achieved through the use of both conventional and future fuels.

Its success is based on a modular burner design, which enables simple configuration for a wide range of different installation situations. This makes the ATONOX extremely flexible and reduces both the commissioning effort and costs involved.



- ✓ Robust construction with optimal availability, low maintenance requirements, and a long life.
- ✓ Minimal operating costs thanks to the low use of auxiliary power.
- ✓ High efficiency thanks to low residual oxygen in the exhaust gas even with the strictest emission requirements.
- ✓ Short planning phase, simple installation and commissioning thanks to modular design.
- ✓ Small installation diameter generally requires no changes to the boiler pressure vessel in the case of modernizations.

## Emission values

### NO<sub>x</sub>

Natural gas ≥ 30 mg/Nm<sup>3</sup>

H<sub>2</sub> and other gases ≥ 30 mg/Nm<sup>3</sup>

Light fuel oil ≥ 75 mg/Nm<sup>3</sup>

## Capacity range in MW

### Burner size

	Gas		LFO	
	Q <sub>min.</sub>	Q <sub>max.</sub>	Q <sub>min.</sub>	Q <sub>max.</sub>

140	2.0	14.0	3.0	14.0
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200	2.5	20.0	4.0	20.0
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280	3.5	28.5	5.5	28.5
-----	-----	------	-----	------

400	5.0	40.0	8.0	40.0
-----	-----	------	-----	------

560	7.0	56.0	11.0	56.0
-----	-----	------	------	------

800	10.0	80.0	11.0	56.0
-----	------	------	------	------

## How the ATONOX impresses

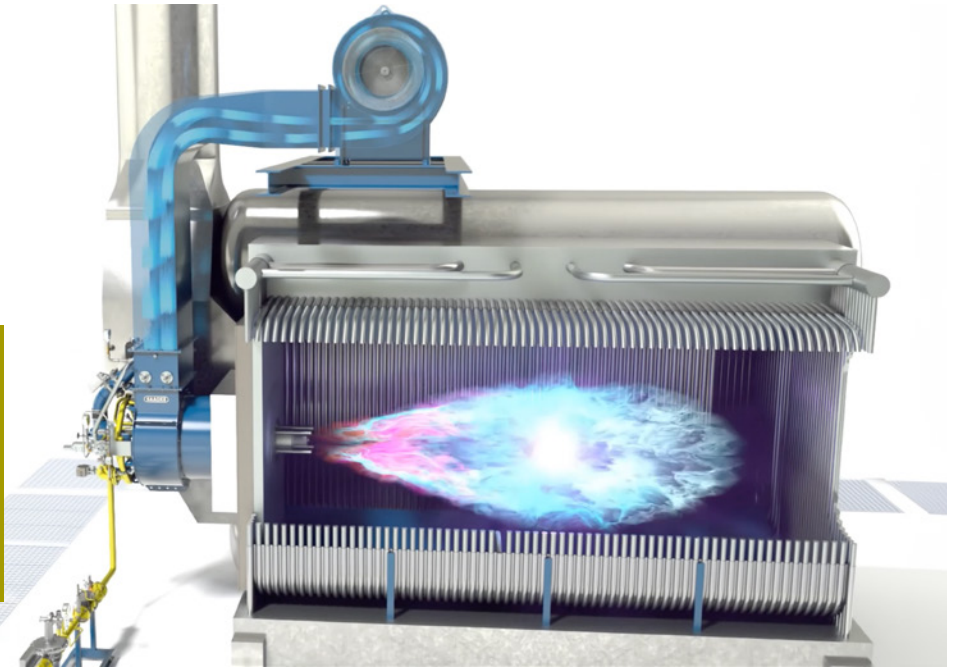
- Secures the future for industrial decarbonization (“H<sub>2</sub> ready” ≤ 100 vol. % hydrogen)
- Biofuels and synthetic fuels
- No or only a little external exhaust gas recirculation required
  - Significant savings
  - Low installation and operating costs
- Compatible with a wide range of control concepts (**se@vis**, Siemens, ...)

# USE OF WATER-TUBE BOILER WITH NATURAL GAS FIRING.

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Watch the application video on YouTube now.



# WHAT CHALLENGE DO YOU FACE?

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## A perfect fit for your industry

-  Energy and heat supply
-  Chemical industry
-  Refineries
-  Food industry
-  Waste recycling
-  Steel and metal processing
-  Building materials industry
-  Wood processing
-  Consumer goods



# WE ARE THERE FOR YOU WHERE YOU NEED US.

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**Contact us:**

**SAACKE Combustion Services Limited**

Langstone Park, Langstone Road  
Havant, Hampshire, PO9 1SA

Tel. +44 (0) 2392 333 900

[webenquiry@saacke.co.uk](mailto:webenquiry@saacke.co.uk)

[WWW.SAACKE.COM](http://WWW.SAACKE.COM)