

- HEAT RECOVERY
- BIOMASS
- PRIMARY FUELS
- SOLID RESIDUES
- LIQUID & GASEOUS RESIDUES

PROCESS STEAM BOILER PLANT FOR A CHEMICAL COMPANY, GERMANY



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Fuel	Natural Gas, Production Residues (g)
Calorific Value (min./max.)	32,500/ 37,800 MJ/Nm ³
Fuel Throughput Rate (max.)	12,150 Nm ³ /h
Thermal Capacity of Firing System (max.)	121 MW
Steam Capacity	150 t/h
Steam Temperature	520 °C
Steam Pressure	112 bar
Feedwater Temperature	145°C
Waste Gas Temperature	130 °C
Operating Licence	13th Federal Immission Protection Ordinance (13. BImSchV /SVTI)
Year of Commissioning	2012

THE TASK

The existing power plant is operated by the customer to supply the adjoining refinery with electricity and process steam. As the 'old' boilers Nos. 1 and 2 are not in compliance with the new environmental guidelines and could not be retrofitted, either, Standardkessel Baumgarte was entrusted with the task of constructing a new boiler no. 8 in order to cover the energy requirements using the plant's own production residues and, with the concept implemented, to ensure the safeguarding of the steam supply at the location.

THE SOLUTION

The steam generator boiler no. 8 was conceived as a 3-pass radiant boiler and is of a vertical type of construction. The firing system is designed as a floor-mounted firing system with a total of 4 burners. In the case of operation on natural gas, a flue-gas recirculation system is provided for the reduction of NO_x emissions as well as for superheated steam temperature support.

SCOPE OF SUPPLY

- Steam Generator
- Firing System for Gaseous Fuels
- Air and Flue Gas Ducts
- Stack
- Piping
- Electrical And Instrumentation and Control Components
- Steelwork, Stairs and Platforms

SERVICES

- Engineering incl. Obtaining of Approvals / Licences and Liaising with Authorities
- Delivery, Erection and Commissioning
- Trial Operation

