HEAT RECOVERY BIOMASS PRIMARY FUELS SOLID RESIDUES LIQUID & GASEOUS RESIDUES



PRZYJAZN II DABROWA GÓRNICZA, POLAND



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Fuel	Coke-oven gas
Low Heating Value (min./max.)	33,3 / 35,7 MJ/kg
Fuel Throughput (max.)	21,71 t/h
Rated Thermal Input (max.)	183 MW
Steam Capacity	250 t/h
Steam Temperature	542 °C
Steam Pressure	122 bar
Feed Water Temperature	220 °C
Flue Gas Temperature	160 °C
Year of Commissioning	2015

THE TASK

The coking plant Koksownia Przyjaźń S.A. in Dabrowa Górnicza produces the fuel coke that is important for the production of steel. At the same time surplus gas in the form of coke-oven gas is obtained. Due to the good experience with Standardkessel Baumgarte who had already carried out construction of a first plant, that company was entrusted with the design of a further residue waste to energy plant. The second plant produces, likewise with coke-oven gas-based heating, both process steam and electrical energy.

THE SOLUTION

The steam generator was conceived as a radiant boiler of a 2-pass type of construction. The first pass is a combustion chamber and radiant chamber at one and the same time. The second pass houses the superheater and evaporator tube banks. The firing system was designed as a bottom firing system with a total of 4 burners. In order to reduce the NOx emissions as well as for adherence to the required superheated steam temperature in part-load operation a flue-gas recirculation system has been integrated.



SCOPE OF SUPPLY

- Steam Generator
- Firing System for Gaseous Fuels
- Air and Flue Gas Ducts
- Piping
- Electrical, Instrumentation and Control Components

SERVICES

- Engineering incl. Obtaining Approvals and Liaison with Authorities
- Delivery, Erection and Commissioning
- Trial Operation