HEAT RECOVERY BIOMASS PRIMARY FUELS

SOLID RESIDUES

LIQUID & GASEOUS RESIDUES

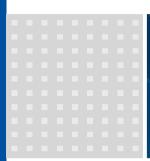


TREA II GIEßEN **GERMANY**





TREA II GIEßEN, GERMANY



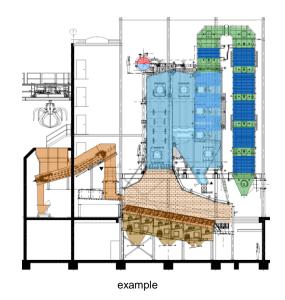








Number of Lines	1
Fuel	Household and Industrial Waste
Heating Value (min./nom./max.)	11.0 / 12.5 / 14.5 MJ/kg
Fuel-Throughput	2.9 t/h
Rated Thermal Input	10 MW
Steam Capacity	13.8 t/h
Steam Pressure	45 bar
Steam Temperature	390 °C
Feedwater Temperature	103 °C
Flue-Gas Flow	20,800 m³ i. N./h
Exhaust-Gas Temperature	140 - 160 °C
Operating Approval	17. BlmSchV
Year of Commissioning	2017



THE TASK

For a reliable and sustainable supply of energy to the city of Gießen, the municipal utilities Stadtwerke Gießen AG (SWG) are constructing a thermal residual waste treatment and energy recovery plant. The power plant, designed according to the cogeneration principle, is intended to supply the electricity generated to SWG's existing electricity network, in order to feed in the electrical energy produced. In addition, the plant will supply energy for the existing district heat network. Standardkessel Baumgarte secured the order for the supply of the steam generator and the grate.

THE SOLUTION

The feature of the new plant is the combination of waste incineration in conjunction with two gas-driven CHP units which leads to high energy efficiency. The CHP waste gases in this case take on external superheating of the saturated steam generated in the boiler. The firing system, designed as a water-cooled moving grate, is connected to the steam generator consisting of the furnace with the downstream radiation pass and economisers, as well as, the dry flue gas cleaning system and the exhaust heat exchanger, with a planned flue gas temperature of 55 °C.

SCOPE OF SUPPLY

- Steam Generator with External Superheater, Economiser, Valves and Fittings and Piping
- Moving Incineration Grate System incl. the Fuel Feeding System and Combustion Air Components
- Ash Removal System for Boiler and Flue Gas Treatment
- Combustion Air Fans

SERVICES

- Engineering
- Fabrication
- Installation