

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

BIOMASS CHP PLANT ELSTERWERDA, GERMANY



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Fuel	Waste Wood (A1 – A2), Natural Gas, Fuel Oil
Low Heating Value (min./max./nom.)	10.0 / 16.0 / 13.4 MJ/kg
Fuel Throughput (min./max./nom.)	9.9 / 14.4 / 12.2 t/h
Rated Thermal Input	44 MW
Electrical Power Output	12 MW
District Heating Output	12 MW
Steam Capacity	50 t/h
Steam Temperature	452 °C
Steam Pressure	67 bar
Feed Water Temperature	105 °C
Rated Flue Gas Volume	102,000 m ³ /h i.N.
FG-Temperature	180 °C
Operating Approval	17. BlmSchV
Type of Boiler	Natural Circulation
Year of Commissioning	2004

THE TASK

On the area of an existing district heating plant, owned by Stadtwerke Elsterwerda, a new biomass plant should be installed. The new biomass power plant should replace the old district heating plant and additionally produce electrical power for the public grid.

Biomass is used as fuel, according to the definition of the German "Biomass Legislation".

The order was placed to Standardkessel Baumgarte in November 2001.

THE SOLUTION

The plant is equipped with the following procedural units. The fuel is delivered by trucks. Beginning with the receiving station the fuel is conveyed into the storage silos. From there the fuel arrives in the boiler area via a conveying system.

The thermal part consists of grate firing system, steam generator and flue gas cleaning.

The electrical energy being generated in the turbine/generator is fed into the public grid and the process steam into the steam net of the heating power station.

The back up for the district heating system is done by an auxiliary boiler.

SCOPE OF SUPPLY

Turn-key Biomass Power Station

- Civil Works
- Fuel Reception and Transport
- Grate System, Boiler
- Flue Gas Treatment
- Water/Steam Cycle
- Auxiliary Boiler
- Electrical Instrumentation and Control System

ENGINEERING SERVICES

- Engineering incl. Licensing Engineering and Engineering for official Permits
- Assembly and Commissioning
- Trial-Run

