HEAT RECOVERY

BIOMASS

PRIMARY FUELS SOLID RESIDUES LIQUID & GASEOUS RESIDUES



BVA HAGEN KABEL HAGEN, GERMANY



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Waste Wood (A1 - A4) Loc exi 8.6 / 15.0 / 10.0 MJ/kg The sup 10.3 / 18.0 / 15.5 t/h han 2 x 43 MW Tin

20 MW

452 °C

60 bar

105 °C

180 °C

2005

92,600 m3/h i.N.

17. BlmSchV

Natural Circulation

2 x 45 t/h

Located at Hagen a biomass power generation plant shall extend the existing cogeneration plant.

The new biomass power generation plant (BVA) shall on the one hand, supply the surrounding households with electricity and, on the other hand, the adjacent workshop with process steam. Hereby, the principle of cogeneration shall be applied.

Timber and other biogene fuels, according to the biomass regulation, shall be used as fuels.

The order for realisation of the plant was placed with Standardkessel Baumgarte in March 2003.

THE SOLUTION

THE TASK

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

The grate system and the steam generator are executed in two lines. A common dry three-stage flue gas treatment plant is installed downstream the two boiler lines.

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.

SCOPE OF SUPPLY

Turn-key Biomass Power Station

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

ENGINEERING SERVICES

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

Fuel

Low Heating Value

(min./max./nom.)

Fuel Throughput

Steam Capacity

Steam Pressure

FG-Temperature

Type of Boiler

Operating Approval

Year of Commissioning

Steam Temperature

Rated Thermal Input

(min./max./nom.) per Line

Electrical Power Output

Feed Water Temperature

Rated Flue Gas Volume

