HEAT RECOVERY BIOMASS PRIMARY FUELS

SOLID RESIDUES

LIQUID & GASEOUS RESIDUES



RDF POWER PLANT STAVENHAGEN GERMANY



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RDF POWER PLANT STAVENHAGEN, GERMANY



Number of Lines	1
Fuel	Domestic/ Industrial waste
Heating Value (min./max./nom.)	11.0 / 18.0 / 14.0 MJ/kg
Fuel-Throughput (min./max./nom.)	6.6 / 13.15 / 12.2 t/h
Rated Thermal Input	47.5 MW
Steam Capacity	54.8 t/h
Steam Pressure	43.0 bar
Steam Temperature	400 °C
Feedwater Temperature	125 °C
Flue-Gas Flow	95,000 m³ i. N./h
Exhaust-Gas Temperature	170 °C
Operating Approval	17. Federal German Pollution Control Act
Year of Commissioning	2007



THE TASK

In order to supply the production facilities of a large food supplier economically with energy, a combustion line together with all auxiliary equipment was to be designed in consideration of the prevailing geographic conditions. Meeting the requirements for high availability, the plant concept was developed on the basis of comparable realised plants. Besides the steam generator and combustion system the order placed by Nehlsen AG, acting as waste-management Company, investor and plant operator, comprised further plant components and services.

THE SOLUTION

On the basis of comparable realised plants, Standardkessel Baumgarte developed a concept which conforms to the prevailing conditions and meets the requirements for a high availability period. After a long planning phase as from February 2004 Nehlsen AG and Standardkessel Baumgarte finally signed the contract in February 2005. The very challenging time schedule was kept so that the commissioning, the performance record and plant takeover took place in consideration of the agreed conditions in the second quarter of the year 2007.

SCOPE OF SUPPLY

Complete Combustion Line from Fuel-feed Hopper up to Stack Outlet:

- Combustion Grate System (water-cooled), SNCR
- Ignition and Auxiliary Burners
- Fuel Oil Storage Tank and Fuel Oil Supply
- Slag-Removal Systems
- Main-Steam Generator incl. Fittings and Heating-Surface Cleaning System
- Flue-Gas Cleaning Plant with Exhaust-Gas Plant
- Ash and Residue Systems
- Electro, Instrumentation and Control Engineering, Process Control Technology
- Steel Structure with Stairs and Platforms
- Boiler House and Part Building Service

ENGINEERING SERVICES

- Engineering incl. Approval and Official Engineering
- Erection and Commissioning
- Trial Run