

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

# PREZERO ENERGY BERNBURG (PEB) GERMANY



## PREZERO ENERGY BERNBURG (PEB), GERMANY



<b>Number of Lines</b>	3
<b>Fuel</b>	Domestic/ Industrial waste
<b>Heating Value ( min./max./nom.)</b>	10.5 / 18.0 / 15.0 MJ/kg
<b>Fuel-Throughput ( min./max./nom.)</b>	11.3 / 21.0 / 16.8 t/h
<b>Rated Thermal Input</b>	70 MW
<b>Steam Capacity</b>	80 t/h
<b>Steam Pressure</b>	42 bar
<b>Steam Temperature</b>	410 °C
<b>Feedwater Temperature</b>	130 °C
<b>Flue-Gas Flow</b>	136,000 m <sup>3</sup> i. N./h
<b>Exhaust-Gas Temperature</b>	180 °C
<b>Operating Approval</b>	17. BImSchV
<b>Year of Commissioning</b>	2010

### THE TASK

To ensure the supply of energy to the Solvay Company in Bernburg, a second mainstay for energy supply had to be created. The PreZero Energy GmbH (formerly Energie Anlage Bernburg GmbH) and the pharmaceutical enterprise Solvay planned the installation of a waste-to-energy power plant. On the basis of their powerful references with their conception of identical boiler plants, Standardkessel Baumgarte was able to obtain the order to install three combustion lines with equal performance rating on a turnkey contract basis.

### THE SOLUTION

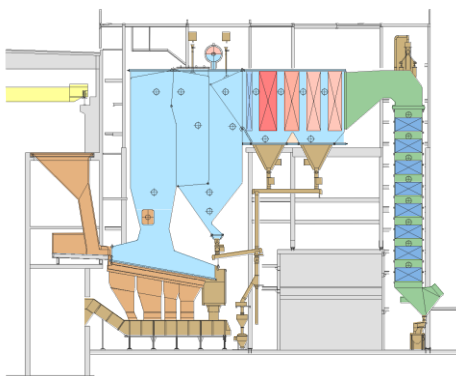
The well-proven technical conception was supplied single source, by Standardkessel Baumgarte. The delivery included, but not limited to, the furnace area situated above a water-cooled pusher type grate, two vertical radiation passes and a vertical economiser was selected for these waste-to-energy combustion lines. The overall scope of order encompasses the fuel supply, feed-water system, instrumentation and control engineering, building services engineering, the flue-gas treatment system and the stack.

### SCOPE OF SUPPLY

- Steam Generator with Valves and Accessories
- Heating Surface Cleaning System as Spray-water System, Rapping and Sootblowing Device
- Pusher-type Grate System including Auxiliary Aggregates
- Ignition and Auxiliary Firing Systems with Fuel Tanks and Conveying Systems
- Fuel Bunker Crane and Slag Conveying Plant
- Boiler and Machine Hall Steel Structure, Supporting Structure for the Firing System and Boiler Including Stairs and Platforms
- Refractory Lining and Heat Insulation
- Flue-gas Cleaning Plant, Forced Draft Fan and Steel Stack
- Metrological Boiler Equipment and Building Services Engineering
- Instrumentation, Control and Low-voltage Engineering
- Emergency Power

### ENGINEERING SERVICES

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



Example