

HEAT RECOVERY
BIOMASS
PRIMARY FUELS
SOLID RESIDUES
LIQUID & GASEOUS RESIDUES

SEWAGE SLUDGE COMBUSTION PLANT KARLSRUHE, GERMANY



SEWAGE SLUDGE COMBUSTION PLANT KARLSRUHE



Number of Lines		1
Fuel		Undigested and digested sewage sludge, screenings and grease traps
Low Heating Value (min./nom./max.)	MJ/kg (dry)	14,2 / 15,0 / 15,8
DS Percentage (min./nom./max.)	%	34 / 38 / 42 (FBC-Inlet)
Fuel Throughput	t(DS)/a	16,800
Rated Thermal Input	MW _{th}	6,4
Steam Capacity	t/h	7,4
Steam Pressure	bar	49
Steam Temperature	°C	415
Feed Water Temperature	°C	105
Exhaust Gas Temperature	°C	180
Auxiliary Fuel		Light Oil
Operating Approval	acc. to	17. BlmSchV
Commissioning	Year	2020

THE TASK

Karlsruhe operates a sewage sludge combustion plant with combustion lines 1 and 2 at the Karlsruhe sewage sludge treatment plant. Within the scope of modernisation work on combustion line 2 (IL 2), the customer awarded Standardkessel Baumgarte for successful completion and commissioning. In addition to an inventory of the existing plant technology, the scope of services essentially includes the commissioning of the combustion line.

THE SOLUTION

During the inventory and subsequent engineering phase, we SBG has checked components for their suitability for future operation. The deficiencies found in the existing system was rectified so that we put the sewage sludge disposal system into operation with VEB 2. The cold commissioning essentially comprised the commissioning of the supplemented and modified plant components. Completion of warm commissioning was with adjusting the plant and finally put the plant into normal operation as intended.

SCOPE OF SUPPLY

Inventory/completion of the components:

- Sewage Sludge Treatment and Transport
- Combustion System and Boiler Plant
- Water-Steam Cycle
- Steam Turbine

Engineering Services

Commissioning of the Components:

- Control System
- Sewage Sludge Dewatering
- Sewage Sludge Drying
- Fluidised Bed Combustion System
- Boiler Plant
- Piping
- Steam Turbine

