

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

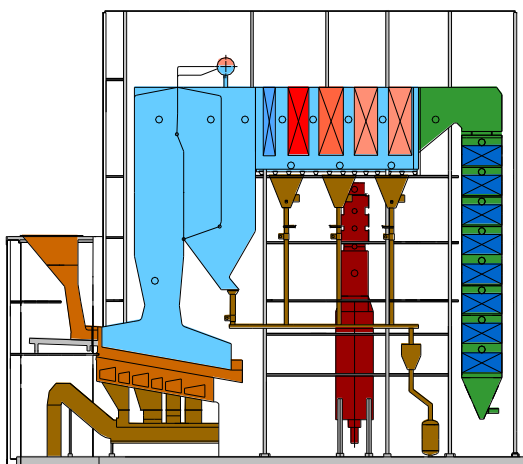
## WTE PLANT OULU FINLAND



## WTE PLANT OULU, FINLAND



<b>Number of Lines</b>	1
<b>Fuel</b>	Household and Industrial Waste
<b>Heating Value (min./max./nom.)</b>	8.0 / 15.0 / 10.5 MJ/kg
<b>Fuel Throughput (min./max./nom.)</b>	11.5 / 16.4 Mg/h
<b>Rated Thermal Input External Superheater</b>	52.4 MW 5 MW
<b>Steam Capacity</b>	58.7 Mg/h
<b>Steam Pressure External Superheater</b>	88 bar 84 bar
<b>Steam Temperature External Superheater</b>	425 °C 515 °C
<b>Feedwater Temperature</b>	130 °C
<b>Flue-Gas Flow</b>	97,000 Nm <sup>3</sup> /h
<b>Exhaust Gas Temperature</b>	150 °C
<b>Operating Approval</b>	EU Directive 2000/76/EC
<b>Year of Commissioning</b>	2012



example

### THE TASK

A waste-to-energy plant is to be built at the industrial location of the chemicals producer Kemira Oy in Oulu. This power plant shall ensure the supply of energy and heat to the City of Oulu and the chemicals company. The municipal energy supplier Oulun Energia Oy placed an order with Standardkessel Baumgarte for the supply of the complete combustion line and auxiliary systems. Operator of this plant will be the Laanilan Voima, an affiliated company of the Oulu Energia and Kemira Oy.

### THE SOLUTION

The well-proven concept embracing a tail end boiler combined with a water cooled pusher-type grate was chosen for this power plant which is conceived according to the combined heat and power principle. However, this concept has been enlarged by an external superheater with a firing system to increase the turbine's efficiency.

### SCOPE OF SUPPLY

- Main-steam Generator with Ash Removal Facility and Accessories
- External Superheater with Firing System (Oil, Control Gas, Constant Gas)
- Heating-surface Cleaning System as Spraying System, Rapping Device and Ball Shot Cleaning Plants
- Water Cooled Pusher Type Grate System including Auxiliary Equipment
- Ignition and Auxiliary Firing System with Accessories
- Slag Conveying System
- Boiler House Steel Structure, Supporting Structure for the Firing System and Boiler including Stairs And Platforms
- Refractory Lining and Thermal Insulation
- Feed Water Supply with Tank and Pumps
- Boiler Instrumentation Equipment
- Snrc / Agam
- Air Preheating
- Demineralised Water Preheating

### Services

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