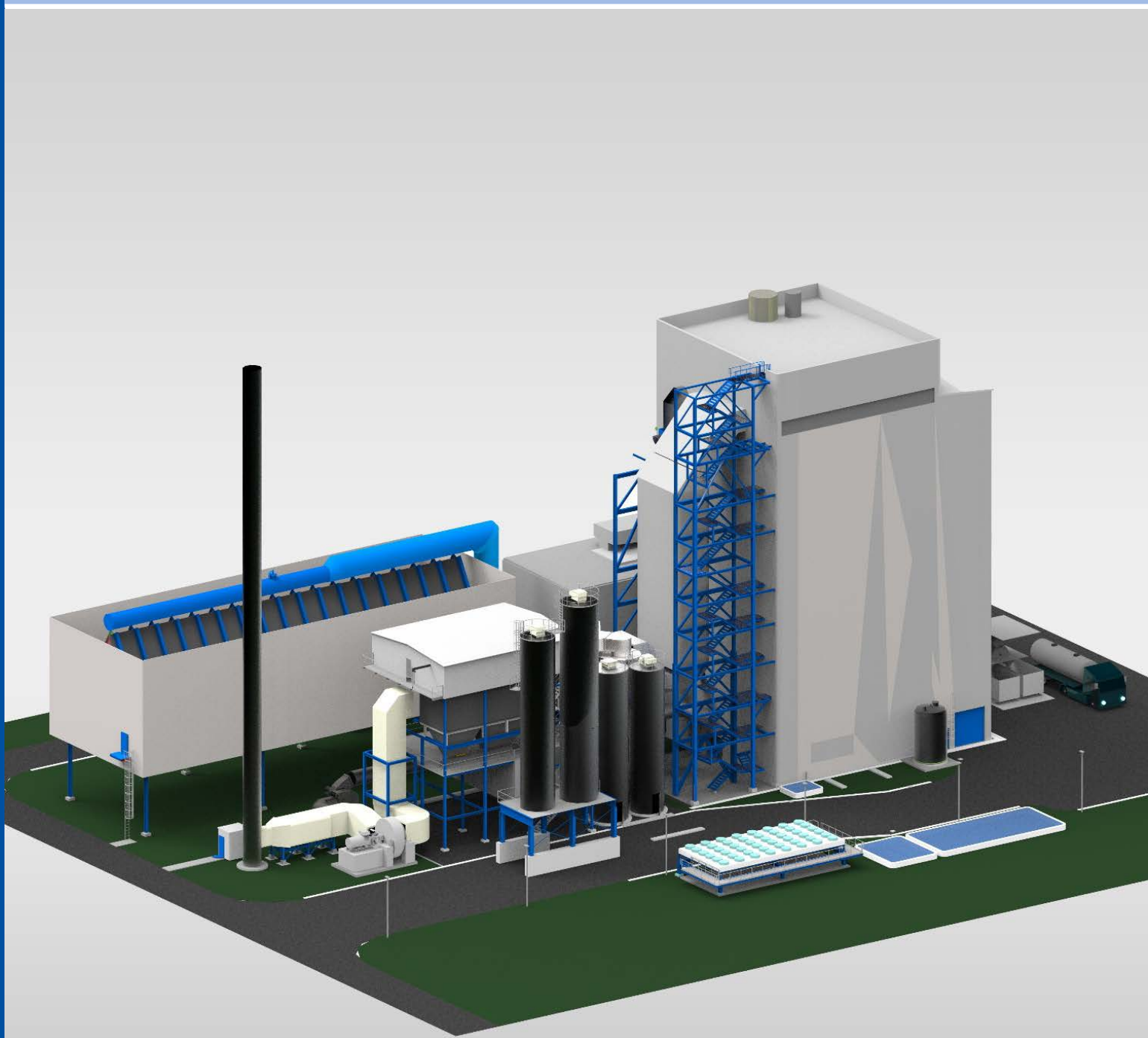


- HEAT RECOVERY
- BIOMASS
- PRIMARY FUELS
- SOLID RESIDUES
- LIQUID & GASEOUS RESIDUES

E-WOOD ENERGIECENTRALE NV BEVEREN, BELGIUM



E-WOOD ENERGIECENTRALE NV BEVEREN, BELGIUM



Fuel	Waste Wood A3-A4, diverse Biomasses
Heating Value (min./nom./max.)	9.5 / 13.5 / 16 MJ/kg
Fuel Throughput Rate (nom.)	150,000 t/a
Total Rated Thermal Input	71.3 MW
Electrical Capacity	20 MW
Heat Extraction	7.6 MW
Steam Capacity	86 t/h
Steam Temperature	453 °C
Design Pressure	73 bar
Feedwater Temperature	130 °C
Flue Gas Volume Flow (nom.)	145,000 m ³ /h i.N.
Exhaust Gas Temperature	130 °C
Year of Commissioning	2022

THE TASK

The E-Wood Energiecentrale NV, a joint venture between Indaver and SUEZ, is building a biomass power plant at the Doel site near the Antwerp container port. As general contractor, Standardkessel Baumgarte is responsible for the supply, construction and commissioning of the entire power plant.

The E-Wood biomass power plant will process approx. 150,000 tonnes of waste wood per year and has an electrical output of 20 MW_{el}. The additionally produced high-pressure steam will be fed into the ECLUSE plant steam network in the Waasland port area.

THE SOLUTION

Taking into account the emission specifications, Standardkessel Baumgarte developed a thermally and structurally adapted concept during the project phase. The steam generator is designed as a suspended water tube boiler and generates live steam at high pressure and high temperature. A stationary fluidised bed is used as firing system, which has decisive advantages with regard to the emissions to be complied with. The homogeneous combustion conditions of fluidized bed systems allow an optimal adjustment of the combustion process. A good mixing of oxygen and flue gas through an optimized nozzle geometry and air control are an integral part of the developed concept. This leads, among other advantages, to very low flue gas emissions.

SCOPE OF SUPPLY

- Fuel Delivery and Storage
- Fuel Pre-Treatment and Conveying System
- Firing System
- Steam Generator
- Flue Gas Cleaning
- Civil Works
- Electrical/Electronic and I+C Equipment
- Ancillary Systems
- External Piping

ENGINEERING SERVICES

- Engineering incl. Approval and Authority Engineering
- Erection and Commissioning
- Trial Operation

