Zauner Anlagentechnik awarded new EPC contract with UPM Nordland Papier (paper mill)



UPM is the leading producer of graphic papers worldwide, and supplies a broad portfolio of products, including magazine, newsprint and fine papers.

UPM is currently investing around EUR 95 million in renewing and optimising its energy supply at the Nordland Papier site in Dörpen, Emsland. For this purpose, a modern, highly efficient combined-cycle gas turbine (CCGT) power plant is being constructed according to the combined heat and power (CHP) principle. This will not only ensure a sustainable heat supply for the site, but also make a significant contribution to reducing CO2 emissions generated in the paper production. The plant is scheduled for connection to the grid in the third quarter of 2022 and will reduce UPM's carbon footprint by 300,000 tons annually.

Zauner Anlagentechnik GmbH has been commissioned with the balance of plant and the preparation of the overall control concept for the plant. We are responsible for the detailed planning, manufacture, delivery, installation and commissioning of the connecting pipelines, fittings and components between the new heat recovery boiler, the existing gas boilers, the two new steam turbines, the condensate system and the existing plants. As a result, Zauner Anlagentechnik has interfaces to all essential providers of the water-steam cycle in terms of process engineering. In order to ensure the safe and efficient interaction of all components, we have therefore also been entrusted with developing the overall control concept for the plant. Live steam parameters of 105 bar(a) and 525°C place the highest demands on materials, processing and quality assurance. Due to the impressive dimensions of the plant site, a pipe bridge with a length of almost 300 metres will also be required to convey the new low-pressure steam pipelines to the paper machines.

We are proud to be playing an important role in the implementation of this ambitious construction project.

Services and performance

- 7,000 metres of pipelines up to DN1200
- 220 tons of technological steel construction
- 900 fittings (incl. steam reducing stations) up to DN700
- 300 measurements
- ICE technology
- Process engineering
- Detail engineering
- Integration planning
- Risk analysis
- Control concept
- Installation
- Commissioning

Key technical data CCGT

- Thermal output: approximately 190 MW
- Electrical capacity: approximately 80 MW
- Fuel utilisation rate: 90%
- Live steam temperature: 525°C
- Live steam pressure: 105 bar(a)

