ASV6, new biomass-fuelled power plant at CHP Plant Asnæsværket

Delivery of building work for the plant's conversion from burning coal to wood chips

The CHP plant Asnæsværket near Kalundborg is Ørsted A/S's largest power plant. Whereas the existing blocks burnt coal, the new block will convert energy production from coal to sustainable wood chips. Wood chips will mainly come from residual products such as branches, twigs and thinning out trees. The new biomass-fuelled block building, called Block 6 (ASV6), has a capacity of 25-MW power and a total of 129-MW district heating and process heat. In a main contract, Aarsleff delivered the building work for the CHP plant's new Block 6.

Building work

Our work comprised earthwork and terrain work, including excavation of 50,000 m³ of soil as well as installation of sewers. Aarsleff's ground engineering specialists installed 12,500 metres of driven concrete piles and 200 ground anchors serving as foundation for the new block building.

We delivered all concrete work for every building section involved, including the construction of turbine basement, columns, turbine slab and the turbine top plate built 20 metres above ground level. The latter is the foundation for the turbine which is the heart of the block building. The casting process was complex and technically challenging.

Moreover, the project included all work for the completion of an 800-m²-large control room building. Our sister company Wicotec Kirkebjerg A/S delivered all the technical installation work for the control room building. The project also involved construction of sites, roads and pavings, including construction of a 50,000-m²-large wood chip handling site complete with tanks and weighbridge.

An ambitious time schedule

As there were delays at the beginning of the project, the client wanted us to accelerate work to make up for delays already occurred. So, an ambitious time schedule was agreed with the client. This time schedule included two-shift operation for five months from March to August in 2018 when we were casting the turbine top plate. At the peak of our work activities, around 120 concrete workers were involved.

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Data

- 12,500 m of driven concrete piles
- 200 ground anchors
- 50,000 m³ of excavation
- 8,000 m³ of concrete cast in situ
- 1,000 tons of reinforcement
- 800 m² of control room building
- 50,000 m² of asphalt and SFB paving.

Client

Ørsted Bioenergy and
Thermal Power A/S

Contractor

Per Aarsleff A/S

Subcontractor

Wicotec Kirkebjerg A/S

Type of contract

Main contract

Consultant

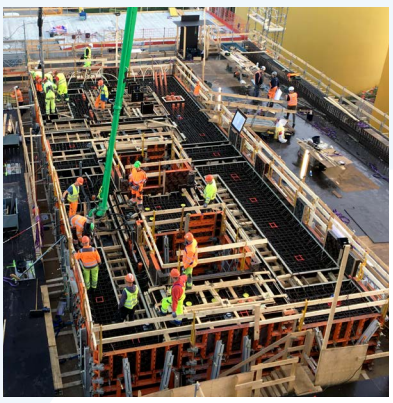
Rambøll A/S
(client's consultant)

Construction period

January 2018 to May 2019

Contract value

DKK 115 million



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