Start of installation of technological equipment at the New Czechnica Combined Heat and Power Plant

10/28/2022



The foundation of the steam turbine at the construction site of the New Czechnica Combined Heat and Power Plant is ready. Installation of the first pieces of process equipment including the four peaking and reserve boilers begins. The construction of a gas-fired combined heat and power plant in Siechnice near Wrocław is a priority investment by Zespół Elektrociepłowni Wrocławskich KOGENERACJA S.A., part of the PGE Energia Ciepła Group.

Work on the New Czechnica Combined Heat and Power Plant has been underway for almost a year now. The foundation stone for the project was laid on 15 October 2021, and in September this year, the contractor for the task (a consortium of Polimex Mostostal S.A. and Polimex Energetyka Sp. z o.o.) completed the foundations of the main equipment and facilities. Foundation work on the site has been carried out by Polimex Budownictwo since May this year.

- The work being carried out on the site brings us closer every day to the commissioning of the New Czechnica Combined Heat and Power Plant. The facility will run on low-emission gas fuel. The technology used will improve air quality in the region. Not only will emissions from the combustion of solid fuels be eliminated, but the inconvenience associated with handling the management of by-products of combustion will also disappear - says Andrzej Jedut, President of KOGENERACJA.

In September, the foundation of the steam turbine unit was completed, the final element of which was the construction of a $19.6 \text{ m} \times 7.5 \text{ m}$ top slab with a slab height of 2.6 to 2.9 m, this slab is built 8.2 m above ground level and supported

on 6 reinforced concrete columns. The concreting of the top slab alone took more than 10 hours without a break and finished at 3.30am. More than 110 tonnes of reinforcing steel and approximately 775 m3 of structural concrete were used to construct the entire foundation for the steam turbine (this amount would be enough for the foundations of more than 70 detached houses).

The steel structures of the main building, the gas preparation building, and the peak and reserve boiler house have already reached their target height. Installation of the roofing and external cladding in the target colours is already underway on the first buildings. The work involves nearly 200 people every day. The contractors are using two tower cranes, several mobile cranes and other heavy equipment necessary for the job.

The construction site has been prepared for the transport and unloading of heavy pieces of process equipment. The 2 peak-reserve boilers, whose transport from the SEFAKO Boiler Factory in Sędziszów required many permits and arrangements, have just arrived. The convoy with the boilers travelled by special trucks, in four stages at night, the route being about 340 km. Each boiler weighs more than 80 tonnes or as much as a locomotive, is more than 8 metres long, 5 metres wide and more than 5 metres high.

- The construction of the new EC Czechnica CHP plant in Siechnice is one of the key investments we are making for PGE Energia Ciepła and our next strategic energy project. I am pleased that the investment is moving forward. This is the result of the involvement of Polimex Mostostal Capital Group teams and good cooperation with the Ordering Party - summarises Krzysztof Figat President of Polimex Mostostal.

A further 2 boilers will arrive at the Siechnice site on 30 September this year. Then their installation in the gable-end boiler house building will begin. These gas-fired water boilers of the KOG-38 type are designed to heat water for heating purposes. Ultimately, the peaking/reserve boiler plant will mainly be used at times of higher customer demand for heat as a supplement to the production capacity of the newly built gas/steam unit.

- The low-emission, environmentally friendly and highly efficient KOG38 gas boilers are one of our flagship products, manufactured using our own technology. Building products based on our own know-how is a value that gives comfort of long-term stability and development of the complementarity of SEFAKO's customer-directed offer.

The EC Czechnica project has very ambitious challenges in the areas of design as

well as scheduling, production and logistics. However, we are confident that by working together we will achieve mutual success.

It should be emphasised that the participation of Fabryka Kotłów SEFAKO S.A. in the creation of new heat sources is part of the trend of low-emission transformation of the energy economy in Poland based on gaseous fuel - hence the KOG38 boilers delivered under the contract will meet the demanding standards of flue gas emissions, which is a confirmation of the strong position of our Company among the leading European companies - manufacturers of boilers for industry, heating and professional power generation - added Jacek Boruciński, President of Fabryka Kotłów "SEFAKO" S.A.

The project has received funding from the European Economic Area Financial Mechanism 2014-2020 (EEA MF 2014-2021) under the Environment priority area, where the Environment, Energy and Climate Change Programme, operated by the Ministry of Climate, with support from the National Fund for Environmental Protection and Water Management (NFOŚiGW), and soft loans from NFOŚiGW programmes ('Energy Plus' and 'Co-financing of projects implemented under the EEA MF 2014-2021') is implemented.

PDF