Opole Power Plant: foundations for the turbine generator unit in power unit No. 6 completed

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Concreting for the foundations of a turbine generator unit was completed in 30 hours. It marked yet another important stage of works carried out by Polimex-Mostostal for Opole Power Plant.

The turbine generator unit foundations in power unit No. 6, similarly to the foundations in power unit No. 5, are supported on 58 vibration dampers affixed to 14 poles which are 12 m high (above the ground level).

Concreting started at 4.30 PM on December 28 and was completed in 30 hours. Concrete was distributed by means of three pumps with the range of 55 m. During the process, concrete mixture parameters were monitored. About 100 people were involved in the activity.

Following the concreting of foundations, thermal and water curing as well as constant monitoring of the concrete temperature will be carried out for next 14 days.

Measurements of turbine generator unit foundations:

length: 60.7 m

width: 17.4 m

height: 3.5 - 4.0 m

Concrete volume - 2100 m3

Weight of steel: 410 tonnes

Weight of foundations: 5,200 tonnes

Weight of foundations along with the installed turbine generator unit - 9,400 tonnes

Łódź School of Technology and the Center for Concrete Technologies of Rzeszów School of Technology supervised the concreting.

Two power units of Opole Power Plant have been constructed by the consortium of Polimex-Mostostal, Alstom, Rafako and Mostostal Warszawa. The PGE Group is the ordering party. This has been the largest industrial project in Poland since 1989. The gross contract value amounts to PLN 11.5 billion, 42% of which, i.e. PLN 4.83 billion, accounts for Polimex-Mostostal. Based on the schedule, power unit No. 5 will be handed over for operation in July 2018 and power unit No. 6 in March 2019. New power units will be generating 15.5 TWh of electricity a year. This output will be enough to meet the demand of 4 million households.

Under the contract, Polimex-Mostostal will construct two cooling towers along with the cooling water system. It will also assemble the equipment in the turbine hall. The company will also provide electrical systems, including instrumentation and control systems. Polimex-Mostostal will also deliver external networks, railroads and internal roads on the power plant premises.

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