Polimex-Mostostal topped out the cooling tower in Kozienice

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The cooling tower in Kozienice reached the target height of 185.1 meters. It is the biggest cooling tower in Europe.

A cooling tower is one of the most characteristic elements of the architecture of a coal power plant. Inside the cooling tower, water is cooled through the heat exchange occurring between the water and atmospheric air. The cooled water is used to cool the condenser of the turbine.

Construction of the shield of the tower began in March 2014. One of the first important steps was to support the shield with 44 prefabricated columns and 44 topped beams. Then, installation of a climbing system and the tower crane began, the target height of which reached 191.5 m to the hook. After installing these components, construction of the tower shield could be started. Execution of the whole structure coating was divided into 147 work cycles, each of approx. 1.2 m.

- In the initial stages of the works, one cycle was carried out over three days. Later, each cycle lasted only one day and this is because the cooling tower is wider at the base - diameter up to 125.5 m. However, it is only 75.8 m in the narrowest point. The shape of the cooling tower is the called rotational hyperboloid. And its total area is 5.5 hectares - Jacek Czerwonka says, the Vice President of Polimex-Mostostal SA.

On the outside of the shield of the cooling tower, 64 vertical wind fins were formed, measuring 8x6 cm, which are to direct the flow of air around the tower. This is a very important solution, because strong winds could threaten the stability of the structure. In addition, another 64 vertical fins were formed for the climbing system.

Soon, on top of the spectacular structure, the so-called upper peripheral gallery will be executed. Work on this part should be completed in 3-4 weeks.

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