Case Study

New lighting system for the heat distribution company

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Our cooperation with Heat Plant in Poland was a consequence of the necessity to modernize the plant’s lighting system. PEC is a leading supplier of thermal energy in the city; it employs over 100 employees and has 14 local gas boiler rooms. In addition, it is an environmentally friendly company - the share of renewable energy sources in heat production is 33.9%.

The customer had specific needs and guidelines that were an extremely important factor for us. They helped us to develop a project that met all of the client’s expectations. Our choice of the luminaires was based on the information collected during several meetings with the main power engineer supervising the project.
Challenge

What lighting solutions will ensure safety and comfort of work in a large power plant?

The client provided us with very detailed guidelines regarding the lighting system that was to be created to better illuminate the area of the plant. They were focused on the efficiency of luminaires, and also expected a reduction in energy consumption costs, which meant that we needed to install energy-saving light sources with above-average efficiency. The new lighting system was also supposed to ensure the safety of people working in the plant. There were some critical areas that had to be taken into account, particularly places where people from the outside might appear, i.e. on the premises in close proximity to the fence. However, the biggest challenge we faced was to find luminaires that could evenly illuminate the urban road where PEC is located.
Solution
Reduced number of light points and increased safety at the same time

Following the client's guidelines and using our long experience in planning street lighting, our design department prepared a project that met all the requirements and provided solutions to the most difficult challenges. To provide even illumination of the road, we decided to use Cordoba V ENEC luminaires - they have high efficiency that allowed us to use only one light point to illuminate a vast area. These luminaires are characterized by the AstroDIM function, which - together with a specially designed lens - ensures optimal light distribution. Such lighting helped us to lower the energy consumption for up to 1440 W. The quality of the luminaires is confirmed by the ENEC certificate.

To minimize the energy consumption costs, we replaced 150W sodium luminaires with LED ones (56W in many places).
Customer benefits
We have fulfilled the client’s requirements

- Increased safety of employees and people in close area of the plant
- Reduced energy consumption costs
- Evenly illuminated road
- Improved visibility in the plant
- Meeting EU requirements by using luminaires with ENEC certification
Implementatation Summary

66% lower energy consumption

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Reduction of CO₂ emissions by 21 tons per year