
Light as a Service: Pioneering lighting refurbishment

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The company REMONDIS shows that perfectly illuminated halls and a simultaneous reduction in energy consumption are by no means a contradiction in terms. At its Bad Essen site, the family-run company, which is active worldwide in the fields of recycling, water management as well as municipal and industrial services, has converted the existing metal vapor lamps in favor of modern, intelligently controlled LED lights. In this context, the lighting refurbishment in Deutsche Lichtmiete's Light as a Service concept is setting the trend for the entire group.

"Before the retrofit, there were only two states: light on or light off. Most of the time, the lights were on, from 5 a.m. until closing time, even if there was no one in some work areas or daylight would have been sufficient."

- Heike Redenius, Branch Manager in Bad Essen

Nevertheless: the lighting situation was not really satisfactory at any time of the day in the three halls of the property, which has been owned by the REMONDIS Group since spring 2020. "The lighting was based on outdated metal halide lamps that had not originally been installed for our fields of activity," explained the branch manager. In the halls, two immense baling presses are used to process paper and plastic waste. There are also extensive workshop and storage areas. Heavy truck traffic is the order of the day.

Accordingly, clean and good illumination of driveways and assembly areas is essential. "The workplace directive provided for an improvement in illumination. At the same time, we no longer wanted to consume energy unnecessarily," says Redenius. Sustainability and resource conservation are key pillars of the company's philosophy, and not just in waste and residual material handling. "Our own actions are also constantly under scrutiny," says the branch manager. "This starts with regular training of truck drivers in fuel-efficient driving and extends to energy-efficient management of the real estate used by the company." Lighting plays an important role in this context.

More light, lower costs

The change in technology in Bad Essen clearly illustrates the potential of a lighting refurbishment: before the retrofit, 400-watt metal halide lamps provided light more badly than good. The new, modern lighting concept is based on concept light® 198 watt LED high-bay luminaires and a small number of concept light® III 340 LED high-bay luminaires, resulting in perfect illumination of all areas and a significant increase in workplace safety. "All specifications of the workplace directive are more than met," says Redenius. The LED luminaires are products manufactured by Deutsche Lichtmiete in Germany. Heike Redenius appreciates the fact that they are even repairable and can be recycled. "Attributes that fit well with us," says the branch manager.

Lighting control enables additional savings

Of note is the new lighting system's intelligent, radio-based NEDAP control system, which not only offers every convenience, but also the possibility of saving an additional 30 percent or so of energy. In this way, the light coming in through the skylights can be used in a targeted manner. That is, depending on the incidence of light from outside, only as much artificial light is contributed as is needed for the desired illuminance. The radio control system from NEDAP also provides REMONDIS with an uncomplicated platform for monitoring data and records, for example, actual switch-on times and consumption. In addition, a new group switching system was installed so that the lighting in individual areas can be flexibly influenced manually as required.

Lighting refurbishment leading the way

The retrofit, including complete rewiring, was completed in just two weeks. All steps, from the lighting design and installation of the luminaires to the programming of the lighting control system, were in the hands of Deutsche Lichtmiete, which coordinated closely with the staff on site so as not to disrupt ongoing operations. "The planning and implementation were very professional, there were no restrictions whatsoever," confirms Redenius.

For the branch manager, the fact that the company benefits from Deutsche Lichtmiete's all-round carefree package with no investment whatsoever is also groundbreaking for other locations of the Group, for which Bad Essen serves as a role model. Instead, the company pays a monthly rental rate that, thanks to the considerable reduction in energy consumption, is significantly lower than the previous total lighting costs.