Case Study
FM Logistic Blonie, Poland

Energy Savings: 45%
Thorn brings energy efficient lighting to new storage and office facility in Poland

Background
A returning Thorn customer, FM Logistic once again approached Thorn to provide the lighting for the new FM Logistic Blonie storage and office facility in Blonie, Poland. FM Logistic chose to return to Thorn on the basis of the quality and technical functionality of its products.

Lighting objective
The lighting objectives for this new 13,600m² building were to achieve an energy efficient lighting scheme which would provide an attractive return on investment and low maintenance throughout the products’ lifetime.

Products used
- HiPak Pro LED
- Aquaforce II LED
- Omega LED
Lighting solution
For the storage area, Thorn’s HiPak Pro LED offered a solution which would meet all of FM Logistic’s objectives. A robust, low maintenance and energy saving industrial LED high bay luminaire (93Lm/W), HiPak Pro LED is up to 45% more energy efficient than 250/400W alternatives. An integral PIR sensor and DALI dimming maximise energy savings while a dedicated body profile and on board thermal management system ensure LED performance and lifetime.

For the technical rooms Thorn’s Aquaforce II LED IP65 rated luminaire offered a high quality low energy solution. Highly efficient LED (102Lm/W) reduce energy consumption and costs while maximising maintenance lifecycles.

Finally, for the offices, Thorn’s Omega LED (75Lm/W) provided the ideal solution with an energy consumption of half that of a 4x18W (T8) fluorescent alternative. Omega LED also offers the added benefit of adjustable mounting options for through-life flexibility.

Results and benefits
All the luminaires installed in the new FM Logistic Blonie facility are LED and have high levels of energy efficiency to ensure low energy consumption. With all the luminaires additionally benefiting from a long 50,000-hour lifetime, maintenance is minimised to save both the cost and inconvenience of frequent maintenance cycles. FM Logistic will benefit from a maximum payback time of five years.

eControl
From Thorn’s 15 ways to save energy, the following are key to minimising energy consumption at the new FM Logistic Blonie storage facility and office building:

**Lamp efficacy**
Lamp efficacy is important because the amount of light emitted from a light source [in lumens] compared to the amount of power used by the light source to produce it [in Watts] is key for energy efficiency. All of the luminaires chosen for this project use the latest LED technology and therefore have a high lamp efficacy and low energy consumption.

**Presence/absence detection**
Lighting controls used in conjunction with HiPak Pro LED detect when the space is empty and automatically turn the lights off to prevent energy being wasted.

**Luminaire distribution**
HiPak Pro LED features dedicated individual LED optics for precise light control. This optimised luminaire distribution allows a single row of well-spaced luminaires to be used to correctly light the space. In turn, the quantity of fittings and therefore overall energy consumption is reduced.

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Publication Date: 05/15