

**TEXT** Sigi Riedelbauch, Public Touch  
**PICTURES** Hartmann International

# *Optimum illumination with maximum energy efficiency*

*Environmental impact is an important guiding principle for  
logistics company Hartmann International.*

The logistics company Hartmann International, based in the East Westphalia and still run by the Hartmann family, is celebrating its 160th anniversary in 2016. In addition to logistics and freight forwarding services, they also offer haulage, as well as Air & Sea services. The certifications they have gained for quality and environmental management are evidence of the global company's six generations of continuous dynamic and innovative developments.

Environmental impact is an important guiding principle for Hartmann International. 10,000 m<sup>2</sup> of photovoltaic systems and special driver training to encourage lower fuel consumption speak for themselves. Another example is the way in which the logistics hall is equipped at Hartmann International Head Office in Paderborn. It has been fitted out with state of the art lighting and control technology from Berling and Helvar.

It all began with the Hartmann International subsidiary branch in Ibbenbüren. Through its physical proximity to Berling Living Lights, a company that specialises in the planning, design and manufacture of lights, contact was made and an idea was formed to plan and implement lighting control for the Ibbenbürener subsidiary branch. Andreas Hartmann, managing partner of Hartmann International, liked the energy-efficient solution in Ibbenbüren so much that he also wanted to implement it at their head office in Paderborn.

### **ENERGY EFFICIENCY IS OF CRUCIAL IMPORTANCE**

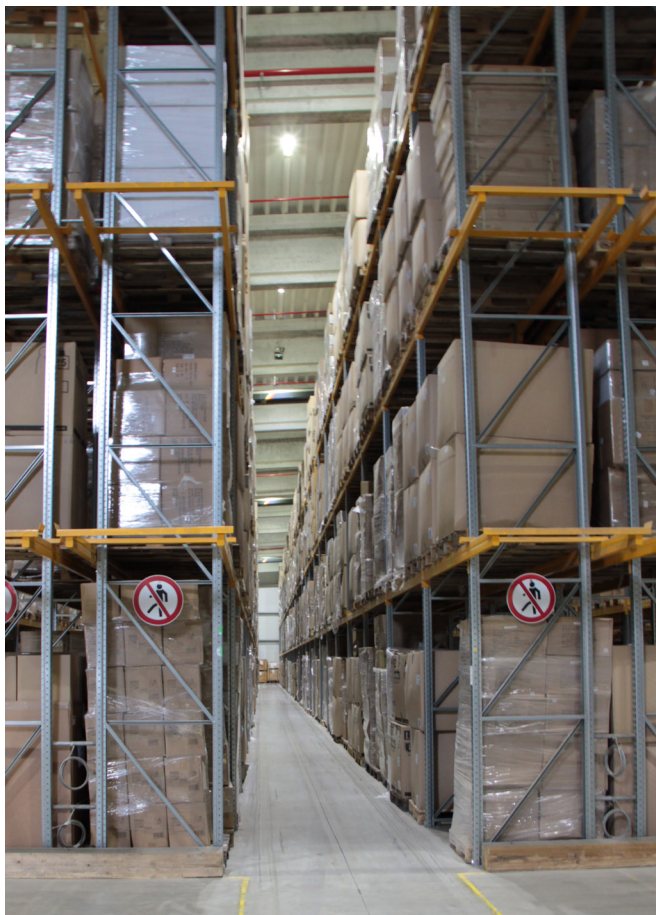
The project for the Paderborn-based forwarding and logistics company involved the logistics hall, with its cargo handling area and high shelf storage areas, covering a total of 40,000 m<sup>2</sup>. The aim was to segment the areas so that lighting could be separately and individually regulated.





## System facts

- 8 x 910 Routers
- 1 x 905 Router
- 63 x 452 Universal Dimmer
- 165 x 317 High-Bay PIR Detector
- 298 x RANA single row
- 38 x RANA double row



In order to achieve this, a total of nine Helvar DIGIDIM routers were used for flexible lighting control.

There are also zones in the hall, which sees activity in different patterns. The rack storage aisles, which sometimes reach 60 metres in length, should only be illuminated when persons or vehicles are present. A Helvar High-Bay PIR motion sensor was installed for this purpose. They are designed specifically for motion detection at high mounting locations. The highly sensitive sensor technology is integrated with precision optics, allowing installation at a height of up to 15 metres.

In the words of Andre Berling, a lighting designer for Berling Living Lights GmbH: "We have already completed several projects with Helvar in the past one-and-a-half years, and we value the planning and technical execution service they provide."

## PRECISE AND COMFORTABLE ILLUMINATION

Another requirement was that the lighting was uniform: it was expected that as little shadow as possible would fall on the ground or on the packages. The camera technology that was installed is able to accurately detect movements, to enable better tracking of consignments for example. Another advantage of uniform illumination is an increase in the comfort of the working conditions.

The design and execution company Berling Living Lights understands very well the demands and requirements of production and logistics facilities. To provide a solution for this project, they opted for the self-developed Rana modular LED lighting system.

The dimmable Rana LED system can be provided as individual lights or as a 1-row or 2-row module. It's unique feature is not only that each light can be individually adjusted, but also that different lenses with a beam angle of 20 to 75 degrees are available. Together with a large number of light installation points, this means that the formation of shadows can be avoided. The use of LED technology, controlled over DALI and in combination with the Helvar lighting control and sensors, provides maximum energy efficiency and reliability. The LED lights are also low-maintenance and can be replaced on an individual basis.

"The lighting project at the Paderborn head office is a complete success", says Andreas Hartmann, managing partner of Hartmann International GmbH & Co. KG. "Energy savings of up to 75% and optimum illumination is a result that has exceeded our expectations."

“

*"The lighting project at the Paderborn head office is a complete success. Energy savings of up to 75% and optimum illumination is a result that has exceeded our expectations."*



## *Hartmann International GmbH & Co. KG*

The company was founded in 1856 by Anton Hartmann and is still run today by family members. Based at two locations in Paderborn and Ibbenbüren, the logistics and freight forwarding company employs around 400 people. At their headquarters in Paderborn, the company operates 24,000 m<sup>2</sup> of warehouse space and a cargo handling area of 7,000 m<sup>2</sup>. In Ibbenbüren, there are a further 18,000 m<sup>2</sup> of operating space.

Hartmann is committed to social issues and is strongly oriented towards its staff and the environment. In 2013, the logistics company generated a turnover of EUR 104 million.

## *Berling Living Lights*

Berling Living Lights offers excellent products, is experienced in the market, identifies important trends, creates attractive value added chains and offers a service that is characterised by a proximity to customers. It's strengths lie in the development of customer-specific LED lighting systems. Many years of experience in the selection and management of suppliers and manufacturers ensures high quality, flexibility and adherence to delivery dates.

Whether for storage and logistics halls, offices and commercial buildings, outdoor areas or sports facilities, a detailed lighting design is created for each project, taking into account all pertinent regulations and special requirements. This ensures that the desired requirements are optimally met in an energy-efficient and cost-efficient way.