



PHILIPS

Västerås Västra

Transportation



Jernhusen saves energy and improves worker safety

88% reduction in energy bill

By installing energy-efficient LED lighting from Philips Lighting in its Västerås Västra train depot in Sweden, Jernhusen has taken a significant step towards fulfilling its environmental objectives with a 88% cut in its electricity bill.

“At Jernhusen, saving energy is our key objective. By 2030 we aim to reduce our electricity consumption by half compared to 2008. This means that each depot must realize annual energy savings of 3%.”

Tomas Söderholm, Technical director at Jernhusen

Many challenges to be overcome

The 12-year-old fluorescent lighting in Jernhusen's train depot in Västerås Västra was approaching its end of life and needed replacing. Moreover, the lighting was on 24/7, resulting in high energy consumption. To meet the company's environmental objectives a highly energy efficient lighting solution was needed. In addition, water-proof, ice-proof and anti-glare luminaires were required. The new lighting also had to improve working conditions and make employees feel safer. A further challenge was that

the facility is operational around the clock, and as stopping production was not an option, the new lighting needed to be installed without disturbing operations.

Easy, disruption-free installation

The existing lighting was replaced by highly efficient Philips Pacific LED luminaires with presence detection. Its easy installation meant that operations were not disrupted, therefore completely fulfilling the original requirement of Jernhusen.

Reduced maintenance

Previously, the replacement of ballasts was a complicated and expensive procedure, requiring special lifts running on the rail tracks.

“As the new installation will last for just over ten years, we will not have to change bulbs for the foreseeable future, radically reducing maintenance costs. Fluorescent lighting would have had to be replaced at least twice over the course of this 10-year period.”

Tomas Söderholm, Technical director at Jernhusen

Intelligent lighting reduces energy consumption

The smart Pacific LED lights have integrated sensors, so the lighting does not have to be on at 100% light level all the time. If no presence is detected, lighting dims automatically to between 50% or 10% depending on the requirements defined by operations. If no presence is still detected 30 minutes after dimming, the lighting turns off completely. When the sensors are activated, the lighting returns to 100%. To achieve further savings, the area is divided into four zones that can be controlled independently. If presence is detected, lights will go up to 100% only in that area instead of in the entire facility.

“I’m very pleased with the presence-controlled LED lighting in our Västerås Västra depot and it’s very likely we will meet our 3% annual energy savings target. I have ordered the same type of lighting for our Tillberga depot; a large-scale facility with multiple buildings.”

Tomas Söderholm, Technical director at Jernhusen

Improved working environment

Employees at the Västerås Västra depot are delighted with the new LED lighting. They find the depot to be brighter and enjoy the improved visibility. What’s more, they appreciate that the space is lit evenly, with no dark shadows, which gives them an increased sense of safety.

“LED lighting today has so many customization options. With intelligent sensors we can achieve high energy savings which give companies an economic incentive to replace old lighting. Although the Jernhusen depot is generally manned around the clock, the lights now don’t have to be 100% on everywhere all the time. Here LED lighting provides a modern solution that improves both energy consumption and employee working conditions.”

Andreas Hybertsen, Manager at Philips Lighting



Significant energy savings

At Jernhusen, luminaires with advanced LED technology account for 50% of the energy saved; the lighting control system achieved a further 38%.



Easy installation and reduced maintenance

Easy and fast lighting installation was important in areas where work was in progress around the clock. LED lighting radically reduces maintenance costs since the installation lasts for over 10 years.



A safer and more pleasant workspace

The right lighting, improved visibility and the absence of dark shadows all contribute to a significantly better working environment for employees, increasing workplace safety.

About Jernhusen

Jernhusen is a Swedish real estate company. It owns, develops and administers major railway stations, maintenance depots and cargo terminals along the Swedish railway - from Luleå in the north of Sweden to Malmö in the south. The company is owned by the Swedish state and its head office is in Stockholm.

[Find out more about how Philips Lighting can transform industrial and production facilities](#)

© 2017 Philips Lighting Holding B.V. All rights reserved. Philips reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.

Date of release
December 2017
lighting.philips.com

