Case study
ABB Drives, Hall E

Location	Helsinki, Finland
Philips Lighting	GentleSpace

PHILIPS

"The most important criteria when selecting a new lighting solution were the technical characteristics and the ability to connect to our KNX controls system; – as well as Philips' reputation as a reliable partner."

Matti Suomalainen, Project Manager at ABB Oy Real Estate

Quality was ensured through trial use of the GentleSpace luminaires

Project info

Customer
ABB
Location
ABB Drives, Hall E, Hiomotie 13, Helsinki, Finland
Philips solution
GentleSpace LED luminaires

Background

ABB, a global leader in power and automation technologies, is the largest supplier of industrial motors and drives, the largest provider of generators to the wind industry, and the largest supplier of power grids worldwide. The company employs 150,000 people and operates in approximately 100 countries. In Finland, ABB is the biggest employer in the capital region of Helsinki. ABB Drives business unit, develops and manufactures low-voltage frequency converters and related software tools. The unit is responsible for global sales and marketing as well as research and product development at ABB.

The challenge

Lighting came strongly to the fore in 2010, during a property survey performed at ABB Drives, where they placed energy saving for the lighting at the forefront for change. Hall E still used the factory's original lighting system from the 1970s. The lamps were at the end of their life cycle, and the condition of the cabling was worrying. Matti Suomalainen, Project Manager at ABB Oy Real Estate: "The most important criteria when selecting a new lighting solution were the technical characteristics and the ability to connect to our KNX controls system; – as well as Philips' reputation as a reliable partner."

The solution

After ABB was introduced to Philips' GentleSpace LED Highbay luminaire they launched a pilot project in 1/16 of the 15,000 m^2 hall, to test this solution in practice; for energy efficiency, controllability, endurance and quality of light. The results were positive: all the criteria set for the lighting were met. According to Matti Suomalainen of ABB Oy Real Estate this pilot lighting project was the largest and longest in duration. "We do pilot projects when the solution is new and unknown to us, which, on the real estate side, is not very often. That's because we wanted at least 6 months experience in use before making a final decision", he says. Philips GentleSpace luminaires can replace lighting solutions that are already in existence, and the benefit of LED technology over traditional technology is that it can be controlled. ABB use a KNX system for control, and using LED meant they could group areas with greater flexibility. The ABB KNX system controls the lighting for Hall E over a 16 area basis.

Benefits

"Optimal lighting is regulated for each area, taking into account the need for light, which depends on activities occurring within the area", says Harri Liukku of ABB Oy. "Natural light is utilised under the control of the KNX system, by maintaining a constant level of lighting, reducing or increasing the amount of lighting according to the availability of natural light. In addition, each area is controlled by a timing programme tied to the schedule of shifts. Lighting control achieves optimum energy efficiency and maximises the life of the luminaires."

Date of release: December 2013
Printed in the Netherlands
Document order number: ABB CASE STUDY INT