

## Dialight's DuroSite<sup>®</sup> Series LED Lighting Fixtures

# Major brewery counts on LED technology to contribute to its environmental protection initiative

Environmental protection has always been of prominent importance to the Munich-based, worldwide reknowned Paulaner Brewery Group. Its well-proven environmental management system documents according to DIN ISO 14001 how the eco-balance is being permanently improved and makes the measures visible. Every year objectives and projects to reduce energy and water consumption are defined. Although lighting only contributes a smaller portion to the overall energy consumption of the Paulaner Group, it strives for reducing CO<sub>2</sub> emission in that area and increasingly relies on the use of energy efficient LED lighting fixtures.



Dialight's DuroSite® Series LED High Bay Fixtures Installed in Paulaner's Munich brewery

#### The current project

The 8 m high and 120 m long covered truck driveway had been equipped with 14 downlight fixtures for 400W HID lamps with an on-time of approximately 2000 hours per year. The department manager for electrical equipment, Harald Zeiller, describes the issue: "We could not switch the fixtures on and off on demand since the metal halide lamps need to cool down for approximately ten minutes before you can turn them on again. And then it takes almost the same amount of time until they have regained their full intensity. Furthermore, the maintenance costs haven't been insignificant." They looked for a powerful, energy-saving and low maintenance lighting system that in addition increases the quality of light in the driveway and thereby the safety for pedestrians.

### The Dialight LED High Bay as problem solver

Mr. Zeiller opted for the LED High Bay fixtures from Dialight.

#### "Besides the mere technical data and the saving potential I was especially impressed by the five year manufacturer warranty,"

#### **About Paulaner**

The Paulaner Brewery Group includes the beer trademarks Paulaner, Hacker-Pschorr, AuerBräu, Thurn & Taxis und Hopf and has about 800 employees. It is the leading exporter of Bavarian beer specialities to the most important foreign markets (Italy, USA, France, and Spain). In 2010 the Paulaner Brewery Group distributed almost 3 million hectolitres of beer.

#### **Installation Snapshot**

- ▷ Truck driveway (120m long, 12m wide)
- ▷ Mounting height approx. 8 m
- $\triangleright$  Number of LED fittings 16
- ▷ Replaced 14 400W HID with 150W LED
- Switch-on by demand (controlled by light sensor)
- ▷ Energy saving: 73% (despite 2 extra fittings)
- $\triangleright$  Average W/m<sup>2</sup> reduced from 4.3 to 1.2

he says. "Also important to me were the easy mounting and the special design of the cooling fins which makes it very unlikely that the inevitable deposit of diesel exhaust particulate will significantly compromise the cooling function."

#### Impressive energy savings

The LED High Bay fixtures have been combined with a newly installed EIB bus system and are switched on and off in groups controlled by a light sensor. This results in further 30% energy saving, in addition to the already greatly reduced system power consumption of 2.4 kW compared to the former 6.2 kW, which has been realised solely by switching to LED technology. Thus a further contribution to achieving the environmental goals for 2011 has been made.

#### Increased safety by improved lighting

"The new light is of a completely different quality, it provides better contrast and is more brilliant", Mr. Zeiller comments. And to increase the safety for the pedestrians walking through the driveway he has even invested in two more fixtures.

Altogether the team at Paulaner is very satisfied with the new LED lighting and also with the cooperation with Dialight. Harald Zeiller: "From sampling to shipping everything went quickly and hassle-free, and if the quality furthermore holds what Dialight promises, there is by all means an opportunity for further installations."



Paulaner improves lighting quality and safety with Dialight's DuroSite® Series LED High Bay Fixtures

#### Typical applications

- ▷ Warehouse
- Manufacturing
- ▷ Food Processing
- Cold Storage
- Canopy
- ▷ Gymnasium
- Conference centres
- ▷ Floodlighting

#### **Dialight LED benefits**

- $\triangleright$  5 year warranty = maintenance free
- ▷ 80% lumen maintenance after 60,000 hours
- $\triangleright$  Up to 93 lm/w
- ▷ Significant energy savings
- ▷ Instant on/off
- $\triangleright$  Superior light quality
- ▷ IP66 rated to withstand dust and moisture
- ▷ Polycarbonate lens
- ▷ No UV or IR
- $\triangleright$  No hazardous substances
- Temperature compensation technology for long life

#### About Dialight

Dialight plc (LSE: DIA.L) is leading the lighting revolution for industrial users across the world. Applying leading edge LED technology it produces high-specification lighting fixtures designed for industrial, commercial, hazardous location, transportation and infrastructure applications to vastly reduce maintenance, save energy, improve safety and ease disposal. The company is headquartered in the UK with operations in the USA, UK, Denmark, Germany, Australia, Japan, and Mexico.

#### Dialight's range of Durosite® Series LED Lighting Fixtures



DuroSite® LED High Bay



DuroSite® LED Low Bay DuroSite® Wallpack / Bulkhead



90.

DuroSite<sup>®</sup> LED Area Light



DuroSite® LED Area Light

Dialight reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: http://www.dialight.com/News/Details/paulaner\_led\_high\_bay\_case\_study

www.dialight.com

MDEXPLRX001\_A