

# zeta

## Specialist Lighting

### Bouygues Energies & Services - Hatfield

Bouygues Energies & Services has upgraded the lighting in its 50,000 sq. ft. Hatfield warehouse, choosing Zeta Specialist Lighting's robust, highly effective, cost- and energy-saving LED technology. The new lighting will lower the company's energy bills by £5,000 per annum, reduce energy usage by 45,000 kWh and shrink its CO2 emissions by 23 tonnes. In addition, Bouygues will realise a further £500 cost saving each year, the amount spent on maintenance.



#### The Challenge

The key driver behind the decision to upgrade the lighting across the warehouse, which is used for storage and distribution, was to ensure it met with recommendations for minimum lighting levels in the workplace.

As a company, Bouygues develops and builds innovative and sustainable projects, so when it came to replacing the energy-intensive 400W SON-T metal halide lamps in its Hatfield warehouse, ensuring the new technology was both eco-friendly and economical, was also a high priority.

#### The Solution

Zeta conducted a full site survey that included measuring the lighting levels across all areas, identifying dark spots and reviewing current and historic energy consumption.

With improving the lighting levels across all areas the primary objective, Zeta recommended its **180W LED Highbay** to be installed in between the racking throughout the warehouse. This energy-efficient, aesthetically pleasing LED solution delivers highly efficient illumination - 18,000 lumens - a level far superior to the legacy lamps.

In addition, **Zeta PRO LED Flood Lights** were strategically sited in all other areas of the building. The LED Flood Light range uses the latest Chip-on-Board LED technology, has advanced anti-glare properties and is a low power alternative to other energy-intensive flood lighting technologies. With a lumen level of 9188, a 113° beam angle and a 6500K colour temperature, this powerful solution delivered significantly improved illumination across the warehouse.

Zeta's recommended solution also incorporated lighting control technology. This included PIR sensors which increase the light levels when a person enters the area and switch the lights off when no-one is in the vicinity. As the building has a number of skylights which let natural daylight in, Zeta's intelligent daylight detection function was also integrated to ensure that the levels are adjusted accordingly depending on the time of day, whilst always ensuring that the recommended minimum lighting levels are maintained.

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### Key Benefits

Zeta's longer lasting, energy-saving and eco-friendly LED solution was designed to address all of the criteria set by Bouygues and importantly the entire project was delivered within budget.

The lighting within the warehouse has been considerably improved, the building is now a much lighter, brighter environment and all areas meet the minimum levels recommended.

The high performance, aesthetically-pleasing LED Highbay has an average rated life of 50,000

hours, while the robust, high efficiency, powerful LED Flood Lights typically last for >40,000 hours. These long-lasting, low maintenance LED solutions immediately provided an annual saving of £500, the amount that Bouygues was spending on maintenance.

In addition to the cost and time savings associated with maintaining the lighting, Zeta's eco-efficient LEDs delivered further significant savings. When compared to traditional energy-hungry lighting technologies, LEDs have a much lower power requirement, energy consumption is up to 65 per cent lower. When combined with lighting control technology as it was here, this figure can rise to up to 70 per cent. For Bouygues, this translated into a 45,000 kWh reduction in energy usage, equating to an impressive £5,000 per annum saving on its energy bill. The other key benefit was the ability for the company to lower its CO2 emissions by 23 tonnes.

Bouygues will achieve a fast return on investment with the savings on energy consumption, maintenance and reduction in carbon emissions, kicking in from day one.

“Bouygues Energies & Services identified the need to improve lighting in our warehouse, especially within the racking areas. The Zeta solution allowed us to improve lighting whilst reducing energy consumption and maintenance costs.”

**Mike Clark, Logistics Manager**

### Solution

- Zeta LED Highbays
- Zeta PRO LED Flood Lights

