

**THORN**  
LIGHTING PEOPLE

## **Case Study**

National Glass Centre, UK



## Thorn Lighting transforms National Glass Centre chimneys into impressive landmark



National Glass Centre is located in Sunderland, England, on the north banks of the River Wear. It aims to share its knowledge of contemporary glass by allowing people to learn how to make glass, watch glass being made and view exhibitions inspired by glass. Part of the University of Sunderland, the Centre is at the forefront of glass research and its facilities are internationally recognised.

A recent £2.3m refurbishment project has more than doubled the size of the Centre's exhibition areas and learning studios. As part of the refurbishment project, Thorn was invited by J H Partners Consulting Engineers to come up with a solution to provide a colour change lighting effect to the two 18m glass centre chimneys and main entrance sign.

### Products used



Contrast LED



Sensa DMX

### Key Facts

- The first UK project to use the new Sensa DMX system to control RGB luminaires
- Height of chimneys: 18m
- Number of luminaires required to illuminate the two chimneys: 8





### Contrast LED floodlight creates stunning colour changing effect

To create the colour changing effect, Thorn's Contrast LED floodlights with Red-Green-Blue (RGB) coloured LEDs were ideal. These luminaires, along with the lighting within the main sign, were all controlled by a standalone Sensa DMX controller allowing for scene control from the main reception. Contrast LED has the power to project light up to 30m while producing a variety of precise beam distributions. By using the latest LED technology, Contrast LED creates a stunning effect while minimising energy use. With a connected load of just 52W, energy savings of 25-65% are possible when compared with typical 70-150W metal halide floodlights.

The Sensa DMX controller provides the ability to have pre-defined scenes and colour change programmes running during the night. The effect on the chimneys means they can be seen from miles around, giving a focal point on the bank of the River Wear.

The Sensa DMX controller has the ability to control up to 32 luminaires on a single output, allowing for individual control of each luminaire via a unique DMX address. DMX splitters can also be used to increase the capacity of the system to 128 luminaires. This allows the DMX control system to offer complete flexibility and future proofing should requirements change due to further developments.

Importantly, the complete lighting system is easy to install and above all, easy to use with the software provided.



National Glass Centre  
is part of the University  
of Sunderland



### From Thorn's 15 ways to save energy, the following are key to minimising National Glass Centre's energy consumption:



#### Task/scene setting

Pre-defined scenes mean that only the required level of illumination is used at any particular time. A timed-off scene prevents waste energy and ensures energy consumption is kept to a minimum.



#### Task lighting

Only the required amount of light has been used to illuminate the chimneys and sign to minimise energy use.



#### Lamp efficacy

Contrast LED's state-of-the-art LED technology (52W) achieves energy savings of 25-65% compared with typical 70-150W metal halide floodlights.



## Thorn Lighting Limited

### UK

Durhamgate, Spennymoor,  
County Durham, DL16 6HL  
Tel: 01388 420042

### Sales support to the market

Sales/Quotations  
Tel: 0844 855 4810  
Fax: 0844 855 4811  
E-mail:  
uk.quotations@thornlighting.com

### Ireland

Thorn Lighting (Ireland) Limited  
Century House  
Harolds Cross Road  
Dublin 6W  
Tel: (353) 1 4922 877  
Fax: (353) 1 4922 724  
E-mail:  
cszonec@thornlighting.com

### Spare parts

Tel: 0191 301 3131  
Fax: 0191 301 3038  
E-mail: spares@thornlighting.com

### Technical support

Tel: 0844 855 4812  
Fax: 0191 301 3107  
E-mail: technical@thornlighting.com

### Literature hotline

Brochures on specific products/ranges  
E-mail:  
brochures.uk@thornlighting.com

**[www.thornlighting.co.uk](http://www.thornlighting.co.uk)**

Thorn Lighting is constantly developing and improving its products. All descriptions, illustrations, drawings and specifications in this publication present only general particulars and shall not form part of any contract. The right is reserved to change specifications without prior notification or public announcement. All goods supplied by the company are supplied subject to the company's General Conditions of Sale, a copy of which is available on request.

**Publication Date: 11 / 13**



Member of the Lighting Industry  
Association



ISO 9001:2008  
Reg: AT-00005/5  
ISO 14001:2004  
Reg: AT-00247/2  
Manufacturing