

## Case Study: World of Glass, St Helens, Lancashire

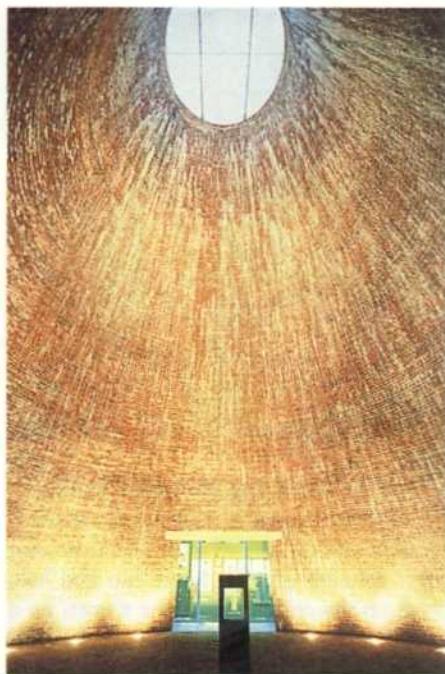
PHOTOGRAPHS BY IAN LAWSON

The entrance to the new World of Glass centre in St. Helen's, sponsored by Pilkington's, is certainly unusual. The architect, Geoffrey Reid Associates, has created a 16-metre high brick cone, with a glazed oculus at the top, in homage to the nineteenth-century glass kilns that used to dot this part of Lancashire. Interestingly too, at night this huge structure is left unlit, to appear in dark silhouette against the glowing interiors of the modern, glazed gallery block behind – an object lesson in how not lighting specific parts of a building can work.

The silhouette effect is accentuated by the further treatment of the solid sections of the main building's exterior walls, by project lighting designer BDP Lighting. The walls are washed by a series of wall-mounted Kriss units from iGuzzini. The

fittings, which throw a narrow beam up the wall and a wide beam down it, are at 3.5m spacings, alternating with the repeating concrete wall details.

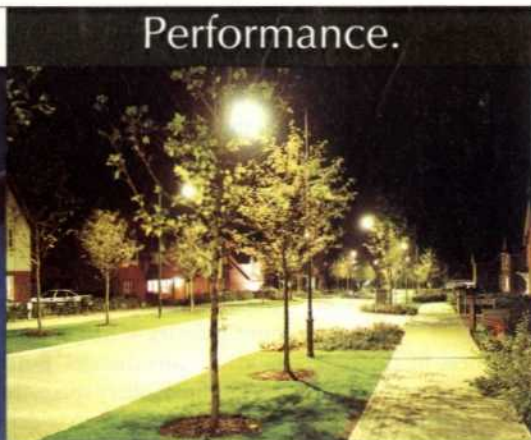
Move inside the 13m diameter cone and BDP's interior lighting scheme comes into its own in a striking fashion. The interior space is illuminated by two contrasting techniques. Firstly a circle of 35W metal halide, wide angle, direct burial fittings by We-ef Lighting wash the lower walls. The low-wattage version was chosen for two reasons, according to project lighting designer, Nicky Burridge: 'We were trying to keep the ambient lighting low and didn't want to illuminate the upper walls. But also, with burial fittings in public locations, there is always the issue of the top glass getting dangerously hot in higher wattage fittings.'



### Theatrical effects

In addition to low-level wall washing, the space is illuminated in a much more dynamic, theatrical manner using a series of Stagescan 300 luminaires, mounted over two of the cone's four doors. Programmed with six distinct scenes, these project a range of colours and moving gobo patterns across the walls and floor, ranging from the subtle and moody to effects straight out of *Disco 2000*.

The centre's main building comprises a glazed pavilion wrapping round three 'black box' gallery spaces. The open pavilion areas are quite simply lit to fairly low levels (50 lux) to allow the retail units and various exhibits to stand out in the space. But the way they are lit is novel – a series of 42W compact fluorescent glass pendant



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fittings, from the Quickly range by Aspect, traditionally known as 'high-bays', are semi-recessed into the ceiling void. This treatment offers a visibly glowing lower rim and halo effect on the ceiling. The same theme, on a smaller scale, is carried through to the glazed bridge which links the new pavilion with the older, reclaimed factory space, across a canal.

Circulation routes such as corridors and stairs are traditionally the Achilles heel of lighting. At the World of Glass both areas are lit in ways that transcend the mundane. The corridors, for example, feature a series of Kreon's recessed asymmetric fittings, with 18W compact fluorescent sources, mounted in the walls at about 1.9m. These gently wash the ceilings, creating a soft, diffused effect at floor level. 'We chose wall-recessed fittings mainly because there is no ceiling void – but they are very effective,' Burrige comments.

### Exploiting a cavity

The main stairwell is even more out of the ordinary, courtesy of a cavity running top to bottom down one side, which was originally designated for services. The lighting-design team commandeered the front half of this cavity, and flush glazed it in acid-etched glass, with a series of Thorn Pop Pack 58W linear fluorescent battens mounted behind. The result is a brightly glowing, full-height glazed wall that adds real character to an otherwise boring space.

The WCs too have been given a livelier-than-usual lighting treatment – the highlight being a play on light and water. The wash basins comprise a tilted clear slab of glass, so that a row of Concord Myriad tungsten halogen, ceiling-recessed downlights create an interesting ripple effect on the floor, as you wash your hands.

However the main business of the new centre is not shopping, walking around or washing, but a series of gallery spaces outlining the history and manufacture of glass. There are three main exhibition areas all



**Throughout the World of Glass, the lighting transcends the mundane, whether in exhibition areas or the imaginatively lit stairwell**

designed by exhibition designer Ideas – and the theme common to all of them is the extensive use of fibre optics, some £110,000 worth, all manufactured and supplied by specialist company Absolute Action.

The advantages of fibre optics in closed gallery spaces, with low light levels, are numerous; the fibre heads are totally cool, which is ideal for fragile exhibits; they can also be fixed permanently within sealed display cases and don't require maintenance, so the exact focus can be maintained; and because one light box can power up to 100 points of light, maintenance is greatly reduced. For example, just 48 150W light boxes powered all the fibre-optic systems in the three main exhibition areas at the World of Glass. Neither are they necessarily confined to display cases – in the Pilkington Gallery, fibre optics were used for the subtle spotlighting of glass artwork.

Elsewhere fibre optics were supplemented by other lighting systems. In the 'Earth into Light' gallery, a snaking track of Torus tungsten halogen spotlights from Concord was used to illuminate various room sets, vertical graphic panels and so on. 'As is the case with most galleries, it had to be flexible to accommodate future changes,' Burrige adds.

The final gallery space, the Nature of Glass, demonstrates an even wider range of lighting technologies, including an interesting orange wash up the walls from ground level. This was

created simply by linear fluorescent fittings, with orange sleeves by Encapsulite, mounted behind a perforated panel. Once more, graphic information panels required dedicated lighting – here they are picked out using the iGuzzini Shuttle spotlight, springing from the walls on curved cantilever arms. The final tour de force is a couple of very popular frame-mounted spotlight clusters, the Cestello system, again by iGuzzini, suspended from the ceiling, above the central seating.

The Cestello uses the AR111 tungsten halogen lamp, which also features elsewhere in the centre. 'It may not seem like it but there are only about a dozen different lamps used in the entire scheme,' Burrige points out. 'That was one of the main requirements of our brief, to keep maintenance to a minimum, as museums and galleries tend to have low staffing levels.'

### READER ENQUIRIES

- |                             |                                      |
|-----------------------------|--------------------------------------|
| Absolute Action <b>1500</b> | Kreon <b>1513</b>                    |
| Ansorg <b>1501</b>          | Luxmate <b>1514</b>                  |
| Artemide <b>1502</b>        | Martin Professional <b>1515</b>      |
| Aspect <b>1503</b>          | Modular <b>1516</b>                  |
| Concord <b>1504</b>         | Monodraught <b>1517</b>              |
| Crompton <b>1505</b>        | Reggiani <b>1518</b>                 |
| Encapsulite <b>1506</b>     | Sill Lighting <b>1519</b>            |
| Erco <b>1507</b>            | Spectral <b>1520</b>                 |
| GE Lighting <b>1508</b>     | Stagescan <b>1521</b>                |
| Hess Lighting <b>1509</b>   | Urbish Interior Lighting <b>1522</b> |
| Hoffmeister <b>1510</b>     | We-ef Lighting <b>1523</b>           |
| iGuzzini <b>1511</b>        | Zumtobel <b>1524</b>                 |
| Iwasaki Eye <b>1512</b>     |                                      |