Royal Mail
Yorkshire Regional Distribution Centre

Weblight was approached by the Royal Mail to provide an energy efficient flexible solution for their Yorkshire Regional Distribution Centre.

The Royal Mail has been investigating a range of initiatives to reduce their carbon footprint across the business spectrum, with electrical usage from lighting being one of their major areas of consumption. The Regional Distribution Centre is one of several imposing facilities within the postal sorting process and acts as a transition point for mail distribution. The site is occupied permanently however functions and activities migrate to different areas during the day dependent upon the tasks being undertaken. These work patterns therefore do not require the lights to be on 24/7 and at full output but have the ability to be flexible in line with work patterns.

The original lighting scheme consisted of 400w luminaires mounted at 11m to service the racking areas and manual activity without any lighting controls providing blanket lighting levels. Moreover, with the single lamp installation, when individual lamps failed uniformity and light levels were compromised.

Following discussion with the Client and a trial installation, the solution agreed on was to replace all of the high bays with a 6 x 49w T5 luminaire. The new fixture provides a LOR of 90% and ensures that all of the available light is used effectively to illuminate the working environment. Aligned to the new fitting is a lighting control system capturing movement and daylight contribution. Both aspects were key requirements as activity and movement migrate around the facility whilst the building benefits from significant levels of natural daylight.

The new fixtures have replaced the original high bays on a simple point for point basis, minimising installation costs and site disruption..

A further benefit of the lighting controls is that light levels can now be set to a maximum and minimum level to ensure compliance to the activity being undertaken. Measurements have now been taken following the completion of the project and the Royal Mail has recorded a 56% reduction in energy and 457 tonne reduction of CO2 per year.

From the current date (June 2008), Royal Mail expect payback within 2.5 years.