



DS Smith Saves 65% on Lighting Energy, Realizes 3-Year Payback with European-Wide Upgrade to Dialight LED Lighting

A leading provider of corrugated packaging in Europe and a specialist in plastic packaging worldwide, DS Smith has a 75+ year legacy of innovation and process efficiency. Started in 1940 by the Smith brothers in London, the company now has operations in 37 countries, employing more than 27,000 people worldwide and posting £4,781m in annual revenue for fiscal year 2016/2017.

With a focus on eco-friendly design and recycling, helping its customers to reduce waste, cost and complexity in their supply chain is a top priority.

The Challenge: Traditional & Costly Lighting

It's also a priority for its own operations, including nearly 250 facilities across Europe. Aiming to reduce energy consumption at sites across the continent, Head of Energy Efficiency Martin Mead began examining options for a major overhaul to DS Smith's lighting infrastructure. At the time, most facilities relied on traditional light sources like metal halide and linear fluorescents for both internal and external illumination.

Not only was the high energy consumption a concern for Mr. Mead, but also the maintenance required by these fixtures was time-consuming and expensive. At many locations, high ceilings and difficult access over the top of machinery added to the cost and time required for a simple lamp change, which was often only possible during planned maintenance.

Installation Snapshot

- DS Smith – global paper & packaging company
- European-wide upgrade at 100+ facilities
- Hundreds of fewer fixtures required
- On average 65% energy consumption and cost savings
- On average a 3-year payback
- Dialight fixtures in 90% of European facilities by 2018



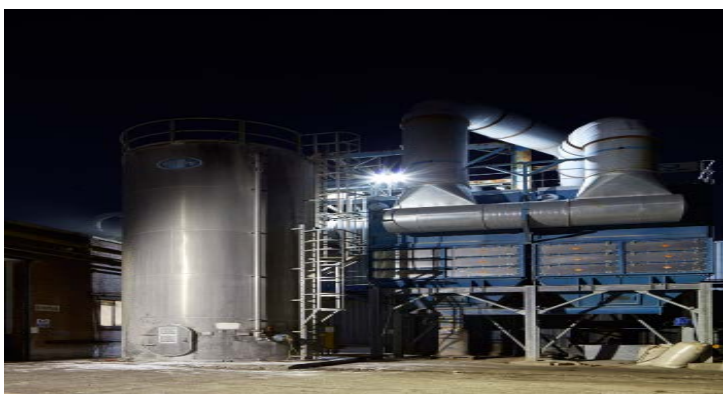
Dialight Vigilant © LED High Bay at D.S. Smith.

The Solution: Dialight High-Efficiency LEDs

Looking for a more efficient, dependable solution, Mr. Mead discovered Dialight, the world leader in LED industrial lighting technology with more than 1 million fixtures installed worldwide. In addition to reducing energy consumption—which translated to a direct reduction in carbon emissions—and the longest maintenance-free performance of any other industrial LED lighting supplier, Dialight's DuroSite® and Vigilant® LED products also offered a much lower operating temperature—an important safety factor in the packaging environment. The deployment of polycarbonate lenses coupled with the elimination of ultra-violet radiation contributes to the attainment of BRC compliance for relevant sites.

"Dialight demonstrated a robust, long-life solution to meet the needs of DS Smith across our many business operations," Mr. Mead said. "They also offered the sophisticated support for a large commercial project of this kind, with outstanding technical expertise and account management."

Working with Aidan Brown of LED Industrial Lighting Co., a UK Dialight agent, Dialight conducted a comprehensive site survey to review current installed lighting and propose a high-efficacy lighting plan for each facility, focusing on optimal light placement and energy efficiency.



Dialight LED luminaires at D.S. Smith facility.



Dialight Vigilant® LED Low Bay installed at D.S. Smith.

The Result: Fewer Fixtures, 65% Savings & Zero Lighting Maintenance

At DS Smith's Clay Cross facility near Chesterfield in the UK, the existing 816 metal halides and linear fluorescents consumed 193kW. By replacing these with Dialight's next-generation Vigilant High Bay, Linear and Floodlight LED products based on the needs at each part of the facility, Clay Cross was able to reduce its fixture count to 636, for a reduction of 180 fixtures throughout the plant. Between the reduction in fixtures and the substantial drop in per-fixture energy use, the result was a massive reduction in electricity consumption, down to just 71kW, for a 60 percent savings in energy costs alone, plus improved lighting uniformity.

In addition, the switch to Dialight LEDs virtually eliminated maintenance, with each of the fixtures covered by Dialight's 10-year warranty for an unsurpassed long-life durability. This not only saves time and maintenance costs, but also eliminates a potential safety risk from accessing lamps at heights or above production equipment.

Between the energy and maintenance savings, Clay Cross realized a payback period of just three years on its upgrade to Dialight industrial LED fixtures. That level of success at the Clay Cross site has been replicated at a number of DS Smith sites across Europe with Dialight fixtures set to replace traditional lighting at 90 percent of DS Smith's European facilities by the end of 2018.

"Dialight's 10-year warranty and ROI were compelling factors in our decision to go with their product at virtually all of our European facilities," Mr. Mead said. "They also offered a level of commercial and technical support and ease of installation that we simply couldn't find anywhere else. We're very happy with the quality of the light output and the bottom-line savings we've seen as a result of choosing Dialight."

All information provided is, to the best of Dialight's knowledge, accurate as of the date of publication, but is subject to change without notice and does not form part of any contract with Dialight. When ordering please refer to www.dialight.com for current versions of all product documentation, which shall always prevail over all other versions.