



OVERVIEW

LED High Bay, Office and Exterior Lighting Retrofit Project at a 338,288 Square Foot Diversified World Class Manufacturer

CHALLENGE

To successfully install a lighting retrofit project at a world class manufacturing facility located in Sumter, South Carolina with two primary buildings (12A and 12B).

Need 1: Improve Lighting Output

Need 2: Greatly Reduce Electricity Costs

Need 3: Greatly Reduce Maintenance Costs

Need 4: Improve Safety for Total Facility

Need 5: Meet SKF's Stated Sustainability Goals

SCOPE OF PROJECT

In total, 2,225 fixtures were installed at this active manufacturing, warehouse and office facility replacing 2,370 existing fixtures. This lighting retrofit project included the retrofitting of all office, warehouse lighting and exterior lighting.

The key fixture solutioning on this project was:

- Replaced 50 Troffers with new LED Panels
- Retrofitted 748 Troffers with 140 LPW LED Sticks
- Replaced 22 Loading dock fixtures with LED Smart motion-controlled fixtures
- Replaced 166 Linear High Bay Task Fixtures with 180 LPW LED Linear High Bay with integral motion controllers
- Replaced 948 Linear fluorescent high bays with 190 LPW LED UFO High Bay Fixtures with integral motion controllers
- Replaced 47 exterior mounted fixtures with high efficiency LED exterior Lighting
- Replaced 43 incandescent interior downlights with high efficiency LED downlights

Improvement of Warehouse Lighting Average Foot Candles as follows:

Average Foot Candles Before = 11 Fc After = 49 Fc



FIXTURE TYPE	FIXTURE DESCRIPTION	WATTAGE/EFFICIENCY	QUANTITY
LED High Bay Fixture	150 watt LED High Bay Fixture, 120-277 Volts, 5,000 Kelvin CCT, 190 LPW with Integral Motion Sensors	150 watt 190 Lumen Per watt Efficiency Fixture	948
LED High Bay Fixture	90 watt LED High Bay Fixture, 120-277 Volts, 5,000 Kelvin CCT, 180 LPW with Integral Motion Sensors	90 watt 180 Lumen Per watt Efficiency Fixture	166
LED 2x4 Flat Panel	50 watt LED 2x4 Flat Panel Fixture, 120-277 Volts, 4,000 Kelvin CCT, 140 LPW	50 watt 140 Lumen Per watt Efficiency Fixture	50

The Helios Energy™ Impact

Energy Reduction –
2,220,775 kWh Reduced

Energy Savings –
\$157,863

Maintenance Savings –
\$77,639

Reducing 2,220,775 kWh per year on this project is equivalent to **3,644,258 lbs** of CO₂ saved or **353** cars removed from the road.

Total 10-year Savings – **\$2,355,080**

TESTIMONIALS

"The new LED lights make it so much easier to see and inspect the finished pieces. And I've not been getting headaches at the end of the shift like I used to."

– Quality Control Supervisor, AN SKF GROUP COMPANY

"Every work area in the plant is brighter! With the fully sealed lights we can clean the lenses annually and keep the same level of light output for 7-10 years with no maintenance expense."

– Maintenance Supervisor, AN SKF GROUP COMPANY

ABOUT OUR CLIENT

There's a lot we take for granted. We're counting on trams, subway trains and buses to take us through our cities safely and sustainably. We trust water treatment facilities to supply us with fresh water, and the food industry to safeguard us from allergens and bacteria. We expect wind farms to keep our lights on, and cars to be electric. There are a million other every day needs to satisfy – and a planet to take care of.

In a world shaped by population growth, urbanization, digitalization and environmental concerns, industrial reality is the true challenge. And that's exactly where we at SKF want to be. Right at the centre, providing reliable performance for the real world.

Our expertise is built on the development, design and manufacture of bearings, seals and lubrication systems. And we also provide machine health assessment, reliability engineering and remanufacturing services. But what we're really offering is an arena for innovation. An open space where our customers can use the tools we provide to explore, improve or rethink the performance of their rotating equipment. A place where even the smallest adjustment can make a big difference to their industrial reality.

