

Dialight DuroSite™ LED High Bay Fixtures

Mustard Maker G.S. Dunn Saves Energy, Improves Quality Assurance with Dialight DuroSite™ LED High Bay Fixtures

At the G.S. Dunn quality control and inspection facility in Hamilton, Ontario, light quality and accuracy is a primary concern to ensure the company's dry mustard products meet its stringent standards. As part of a strategic plan to optimize visibility and reduce energy consumption, the company looked to its current high-wattage metal halide lighting system as a potential area for improvement.

Recently, the company replaced 18 of its 450W metal halide units with Dialight's high-efficiency DuroSite™ LED High Bay fixtures and gained not only superior color rendering, but also significant cost and energy savings to align with the company's fiscal and sustainability goals.



Dialight's Dialight LED High Bay Fixtures at G.S. Dunn quality control and inspection facility in Hamilton, Ontario

Quality from the Ground Up

As the market leader in producing and supplying dry mustard products since 1867, G.S. Dunn has built a worldwide reputation for delivering the finest dry milled mustard products to some of the most notable names in the food industry. To ensure uncompromising quality, the company's stringent quality inspection process requires adequate lighting for optimum visibility.

To achieve the visibility needed, the company had installed 18 powerful 450-watt fixtures in the inspection facility, with each actually consuming somewhere around 540 watts of energy to run the light and the ballast. Because of the light degradation over the life of the fixtures, ensuring optimum light quality for thorough product inspection was an ongoing challenge,

In addition to light quality issues, the powerful fixtures were expensive to operate and maintain. Not only were bulb changes a costly annual occurrence, at \$100 per hour in addition to the cost of the bulbs, but the company had resorted to leaving the energy-sucking lights on 24 hours a day when a third shift was needed to meet production demands. With the metal halide's slow warm-up period, leaving the lights on proved more operationally efficient than waiting around for the lights to warm up.

The LED Trifecta: Color, Cost and Quality

Between the marginal color rendering capabilities and high energy consumption of the metal halides, G.S. Dunn saw an opportunity for improvement. Replacing each metal halide with a Dialight high-efficiency sealed unit DuroSite™ LED High Bay fixture, G.S. Dunn has dramatically reduced its energy consumption, cost of operation and product quality assurance.

"The new LED fixtures are encased in a sealed, lower profile unit with downward directional light that preserves light quality," said Kevin Whyte, Operations Manager with G.S.Dunn. "And, the improvement in color rendering is impressive. The Dialight fixtures produce a crisp, clear white light that improves visibility in our inspection area."

Operating at just 150W, the Dialight LED High Bay luminaires have slashed energy consumption and cost for the company, mitigating the costly ballast loss that pushes the 450W metal halide's energy draw upwards of 540 total system watts.

Furthermore, with typical LED operational lifespan of nearly 10 years, backed by Dialight's exclusive five-year warranty, the company will save significantly on maintenance, bulb replacement and recycling/disposal of the old bulbs.

With instant on/off, the new Dialight fixtures eliminate the energy wasted in leaving the old metal halides burn just to avoid the warm-up. Some of the new fixtures have even been hooked up to motion sensors, further increasing their energy efficiency by cutting burn time to just nine hours per day versus 24.



Energy and Environmental Savings Today and Tomorrow

The company is currently investigating the potential for energy-saving rebate incentives being offered by the Canadian government to help further offset the cost of installation. And, they are considering a retrofit of their exterior lighting with Dialight's exterior Wallpack fixtures.

"We've been an advocate of LEDs for a number of years," said Whyte. "Now we're able to see first hand just how much of an impact this simple change can have on reducing our energy consumption and costs, as well as improving our quality and sustainability practices as a company."

For more information about Dialight's high-efficiency LED high bay fixtures for industrial and commercial applications visit www.dialight.com.



Dialight LED Lighting Features & Benefits

- ▷ 80% lumen maintenance after 60,000 hours
- ▷ 77lm/w (LM-79) certified
- ▷ Significant energy savings
- ▷ Instant on-off
- ▷ Maintenance free
- ▷ Superior light quality
- ▷ No heat or UV

Dialight reserves the right to make changes at any time in order to supply the best product possible.

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www.dialight.com/news/details/GSDunn_case_study

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