

Taking care of Business

Lighting retrofit case study

Company information

Kenny's Candy Company, Inc., in Perham, Minnesota, started making red, black, and chocolate-flavored licorice twists in 1987. The company added the Juicy Twists line in 1996 and Wiley Wallaby Australian Style Gourmet Licorice in 2007. All are distributed both nationally and internationally.

The need

Kenny's Candy recognized the need for more efficient lighting in certain areas of the plant as a way to lower operating costs, increase production margins, and enhance light quality. With Otter Tail Power Company's high-efficiency lighting retrofit rebate, Kenny's Candy decided to move forward in fall 2015 with the retrofit project.

Kenny's Candy

- Electricity saved monthly: 60,000 kWh
- Total cost: \$300,000
- Total rebate: \$75,000
- Annual savings: \$60,000
- Payback period: 3 years

The solution

JC Electric in Perham installed high-efficiency LED (light-emitting diode) light fixtures throughout the plant, replacing fluorescent and metal halide lighting. Dimming controls and occupancy sensors completed the project, allowing the ability to customize lighting levels and shut off lights after ten minutes in unoccupied areas. In addition to expert technical advice and assistance, Otter Tail Power Company provided rebates on each new light and occupancy sensor installed.

"At home, you upgrade because you're paying the bill — why not at work?"
Keith Carlson, Production Manager, Kenny's Candy



Each LED fixture contains 88 individual LEDs.



The improved lighting quality is apparent throughout the areas of the plant that have been upgraded. Note the bright white LED light (above) versus the yellow-hued fluorescent (below).



“Kenny’s Candy is a shining example of making energy efficiency work through cost-effective decision making.”

Chris Waltz, Senior Commercial Industrial Representative, Otter Tail Power Company

Project summary

Kenny’s Candy had updated much of its lighting in 2008 to meet the efficiency standards at that time. Now with expanded space and newer technologies available, a plant-wide lighting retrofit would help the company get the most efficiency and savings.

Chris Waltz, Senior Commercial Industrial Representative at Otter Tail Power Company, conducted an initial walk-through and also provided Kenny’s Candy management with calculations to reflect an estimated return on investment for the suggested updates.

Advantages:

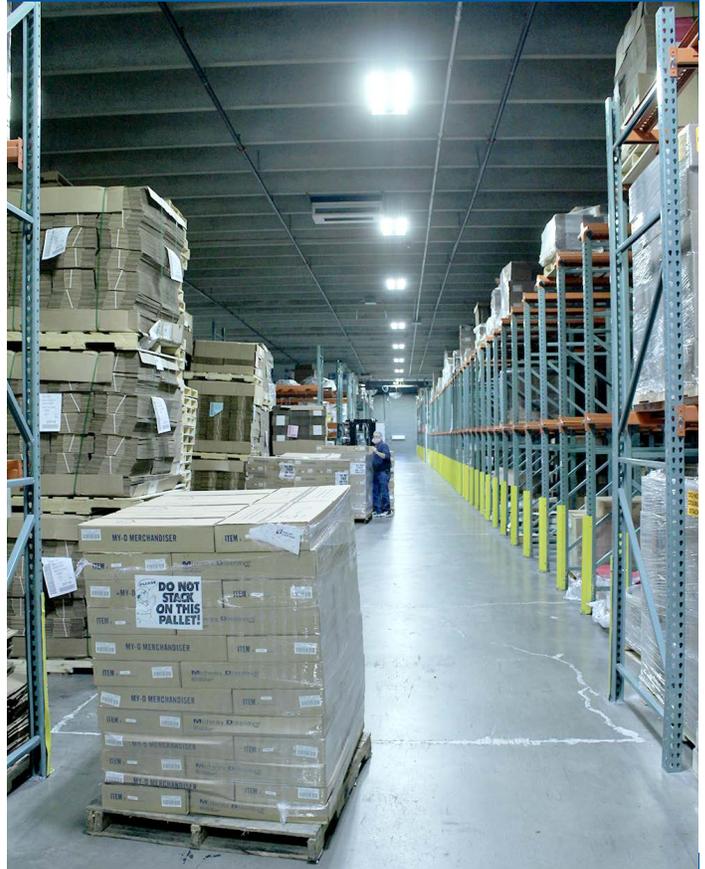
- The new energy-efficient LED light fixtures last about four times longer than metal halide fixtures and twice as long as fluorescents, resulting in a significant reduction in maintenance costs.
- New lighting noticeably improved lighting quality for employees throughout the plant, including hallways, locker areas, staff offices, warehouse spaces, and the production floor. The improved lighting quality enhances safety for plant employees and increases product quality control.
- LEDs have lower input wattage so they give off less heat. As a result, the fully air-conditioned plant will take advantage of lower cooling costs.

Where lights previously were hardwired, on 24/7, and only able to be shut off at the breaker, they now shut off in unoccupied areas with individual occupancy sensors installed on each LED fixture. This allows Kenny’s Candy to light only areas of the plant that are actively being used. Warehouse spaces no longer are lit 24 hours a day, 7 days a week.

LEDs also work very effectively in cool spaces. They are “instant on,” meaning there’s no waiting for lights to warm up before they’re fully bright in coolers and freezers.

Providing our commercial and industrial customers with money-saving energy-efficiency programs is part of our commitment to conserving energy. Thank you to Kenny’s Candy for partnering with us.

Switching to high-efficiency lighting and adding occupancy sensors can cut lighting costs by as much as 80 percent.



In warehouse spaces, occupancy sensors turn lights on when the area is occupied and off when it’s not.

**Make your business more energy efficient
and save money**
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Visit our YouTube channel for more insights into the Kenny’s Candy lighting retrofit.

