Case Study Illumitex

No Small Potatoes Here: New Simplot Factory Lit Up by Illumitex LED Fixtures



Boise-based J. R. Simplot Company is one of the largest privately held food and agribusiness companies in the nation, pioneering innovations in food processing while working to feed a growing global population.

The company invented the first commercial French fry more than 60 years ago and today supplies French fries and other frozen potato products to national and regional restaurant chains — including Mc-Donald's, an eatery known for its tasty fries.

When Simplot began planning the construction of a new, cutting-edge food-processing factory in Caldwell, Idaho, the company had very specific requirements for lighting.

"As the factory designs progressed, we evaluated different options regarding the lighting system," says Simplot energy engineer Don Strickler. "Two of those options included fluorescent lighting, and LED lighting for large portions of the factory. Our analysis compared two scenarios, and our management chose to move forward with the LED solution for those areas. "

The company developed a stringent set of specifications for the LED

Case Study Illumitex

Aesthetics important

light fixtures that would be installed in the insulated metal-panel ceiling of the potato-processing plant.

Illumitex was able to meet the specific requirements for the LED fixtures needed for the 380,000-square foot plant, developing the SP Series High Bay specifically for this project. The SP Series addresses the need for a "durable fixture appropriate for use in a food processing factory with the resulting temperature and humidity parameters," says Strickler. The fixtures also had to adhere to mechanical requirements necessary to fit into the building design, he adds.

Illumitex was ready for the challenge. "Our engineers produced a rugged, high-performance LED recessed fixture designed specifically for Simplot's food-processing application," says Illumitex CEO Chris Hammelef, "while our competition offered up a legacy fluorescent product poorly retrofitted for LEDs."

In addition to the technical requirements for the fixture, appearance was also an important consideration for this Simplot plant. "Aesthetics are very important in our new factory," Strickler says, and so Illumitex designed the SP Series with an attractive and sophisticated appeal. The modern stainless-steel fixture is clear-anodized.

The new factory houses several production lines, some of which are currently in production mode and others of which are still under construction. So far, Strickler says, the fixtures are performing to expectations. Simplot looks forward to gauging the life of the LEDs "once the factory is fully functional at the worst-case temperature scenarios (summer), and operational temperatures reach higher levels."

Case study job specifics

Customer: Simplot Sector: Industrial Usage: Food processing Location: Caldwell, Idaho Solution: Illumitex SP Series High Bay Results: Bright, uniform, temperature-and humidity-tolerant illumination

Case Study Illumitex

Improving energy efficiency

The SP Series offers a published L70 lifetime of 75,000 hours at +40C.

Long life and low energy consumption are important factors for Simplot, as the company is one of several major U.S. companies to join the Obama administration's "Better Buildings Challenge," an effort to significantly reduce energy use over the next 10 years. The Better Buildings Challenge is part of the administration's strategy to improve the competitiveness of American industry and business by helping companies save money by reducing energy waste in commercial and industrial buildings. Simplot has committed to improving energy efficiency across its 16 U.S. manufacturing plants by 25 percent over 10 years, and the new, energy-efficient Illumitex LED fixtures at the Caldwell plant are a part of this strategy, Strickler says.