



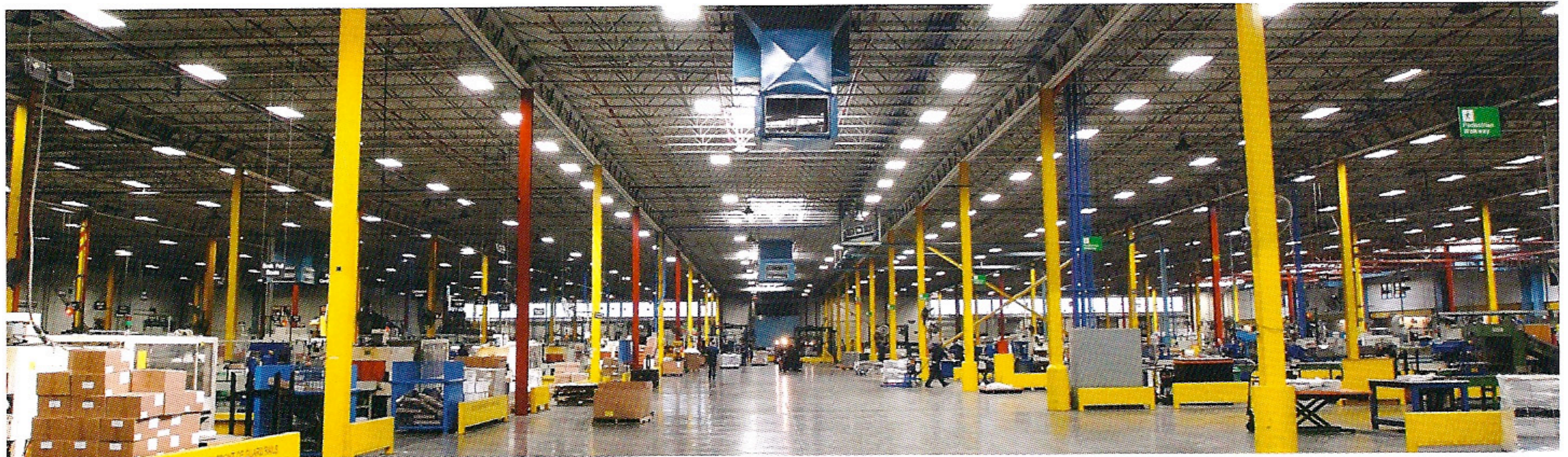
EarthWorks

The industry and its environment

As seen in
Wisconsin
BUILDER



PHOTO BY JOHN EHLERS



Light fixtures manufactured by Orion Energy Systems illuminate Quad/Graphics' Sussex plant.

Shedding light on energy efficiency

By Janine Anderson

Inside work requires light. But bright indoor lighting runs up utility bills, and high-intensity lights kick off a lot of heat.

Six years ago, Sussex-based Quad/Graphics Inc. wanted to do something about its hot and expensive lights.

"We were looking at the new generation of fluorescent lighting that was beginning to hit the market," said Bob Douglas, corporate electrical manager for the company.

Quad/Graphics brought in several test fixtures and hung them side by side. In the end, Plymouth-based Orion Energy Systems, Inc.'s lights stood out from the rest.

Since then, North America's largest privately held printer installed close to 20,000 of Orion's fixtures.

"We knew ... one half the lighting load would disappear if we were to make the transition to the technology," Douglas said. "We have about a \$1.25 million per year recovery based on the decisions we made."

Orion Energy Systems is lighting the

way in energy-efficient illumination. The company's three-phase lighting system earned 18 patents and has nine pending.

Phase one of the system is the company's compact modular high-intensity fluorescent lights. Phase two is a system of controls — like motion detectors — that automatically turn the lights on and off. Phase three is the Apollo Light Pipe, a sun collector that harvests natural light, intensifies it and beams it inside, adjusting the use of lighting fixtures accordingly.

"Orion was actually ahead of the pack as far as having a fully-functioning unit available," Douglas said. "Most of the others were offering prototypes."

Linda Diedrich, director of corporate communications for Orion, said the company wants all its customers to have the results Quad/Graphics had.

"We help our customers manage their energy," Diedrich said, "particularly their lighting."

Diedrich said the old high-intensity discharge lighting fixtures in many warehouses use about 465 watts per fixture.



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BOB DOUGLAS

Orion's high-intensity fluorescent lights use 221 watts, cutting per-light energy use by about half, she said.

Douglas said the lights also illuminate better than traditional fluorescents.

"I think the fun part of doing the first retrofits of this lighting was seeing the reaction people had to the new light fixtures," he said. "As an area would transition, the lighting quality was so much better, everything looked better."

Besides the energy benefits, Diedrich said, the lights are designed to be easy to use. They are lightweight, and customers save money on installation, she said.

"We developed the fixtures seven years ago," said Zach Kurtz, of Orion's business development department. "We saw a market in the commercial-industrial field. There are high ceilings, about 20 feet, and 400-watt metal halide fixtures. We thought we could easily get a fixture that would put out more light and save energy." ■

Orion's compact modular light fixture

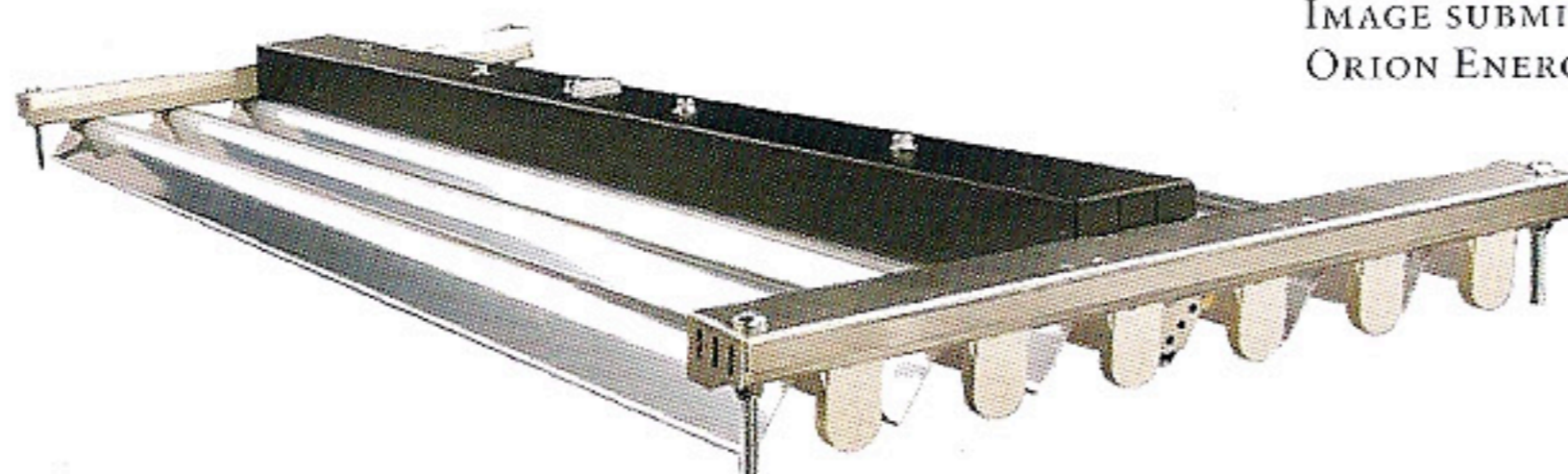


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