



DETAILS



Project:

General Motors Components Holding
Lockport, NY

Lighting Manufacturer:

Starco Lighting

Project Size:

2.6 million square feet

Products:

Starco TLED High Bay – Economic
Starco TLED T8 Premium Series Lamp

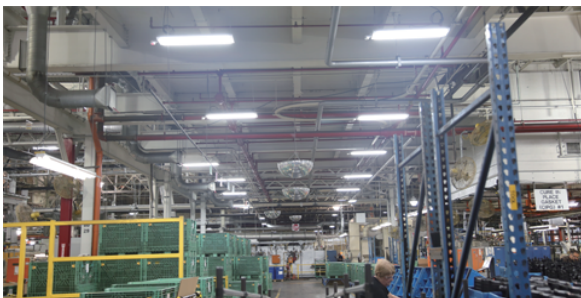
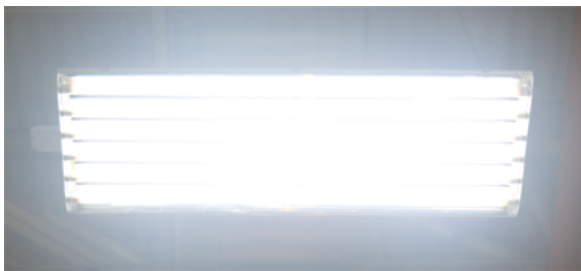
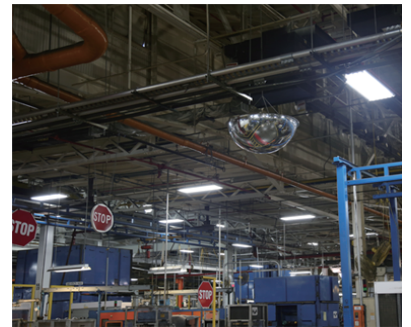
About GM Lockport Components Plant

GMCH Lockport was founded in 1910 as the Harrison Radiator Company for the purpose of designing, manufacturing, and selling automotive radiators and components. Since that time the company has flourished into a lean manufacturing site that produces a wide compliment of Powertrain Cooling and HVAC components and systems. With almost 1,400 employees, the site is focused on continuous improvement through a joint team process between UAW Local 686, Local #55 and Management that benefits the company, employees and customers, as well as the community.

The facility size is 2.6 million square feet or 495 acres. The original metal halide fixtures in the plant were more than ten years old. When the fixtures started to weather, the lenses began to degrade and yellow, which resulted in substantial lumen depreciation. The cost was very high to maintain the metal halide fixtures. The lamps needed to be replaced approximately every 16,000 hours and involved transporting an articulating lift to perform the re-lamp.

The Challenges

The LED solution provided to GM facility had to be able to significantly reduce the energy and maintenance cost to meet a 2-year payback requirement, while illuminating the production and office areas in the facility. The LED products shall last a significantly longer period and be simple to maintain in the future. On the other end, the labor cost to replace the Metal Halide fixtures tended to be more than the LED material cost, including moving the articulating lift and traffic cones etc. The facility is an extremely busy place and the ceiling is 30 feet high.



The Solution

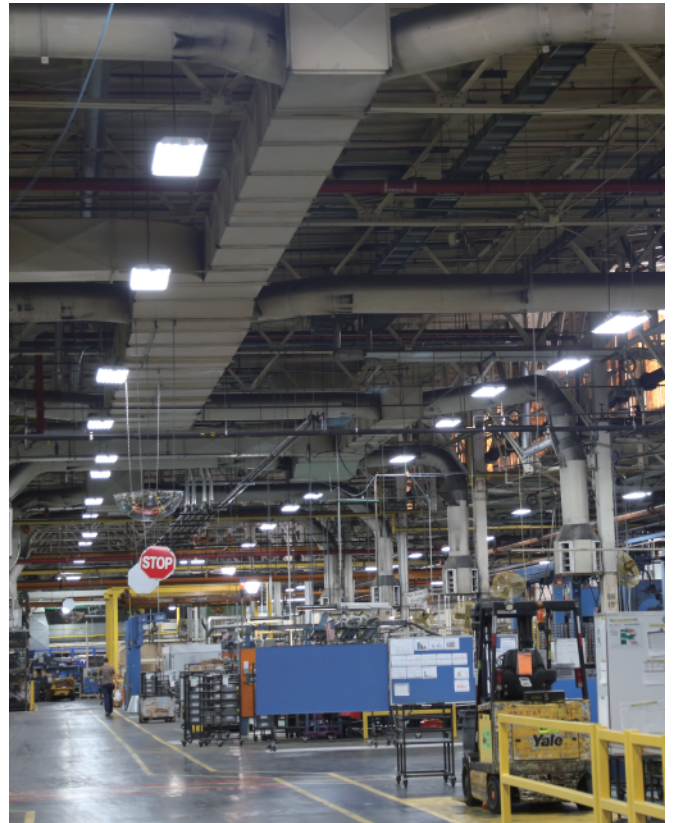
2642 Starco TLED Economic 6-lamp High Bay were installed in GMCH Lockport Buildings 7 and 10. The High Bay used 6 Starco TLED T8 Premium Series 22W lamp. Starco also provides WattStopper occupancy sensor and remote controller for each high bay. The 132W LED High Bay replaces the 400-watt Metal Halide one for one. In the office areas and hallways, Starco TLED T8 Premium Series 13W, 18W and 22W lamps were used to replace the fluorescent T8 lamp in the 2x4 troffer with prismatic lens.

The Results

The Metal Halides requiring 458 input watts were replaced by Starco Economic TLED High Bay which uses only 132 watts; a 71% energy savings. The 32-watt fluorescent lamp was replaced by Starco 13W, 18W and 22W TLED Premium Series lamp. In some office areas, the 2x4 troffer was de-lamped from 2 lamps to 1 lamp with equivalent light output. There are no ballast issues in the future, because the ballasts were eliminated.

“I have already seen a lot energy savings coming.” – Said by Kurt J. Ringwall Jr. Plant Engineer after only two months of installation completed.

“The installation is fairly simple.” said an electrician on site.



Starco Future-Proof Solution

Given the persistent advancement of LED technology, there is no plateau in sight. At the end of life, Starco customers can take advantage of the technology curve as they deem financially beneficial.

Future benefits include: improved interoperability with controls systems, LED functional improvement, increased efficacy, and even possible adoption of organic LED and laser diode technologies in several years.

