

# Leading Innovation in Large Area Lighting

Innovation and customisation: in the world of large area lighting, it's a powerful combination. Nobody knows this better than Musco, which for nearly 40 years now has earned its position as the global innovator in providing customised lighting solutions.

Each year Musco works with thousands of customers from every corner of the globe to engineer, design, install, monitor and maintain light-emitting diode (LED) and high intensity discharge (HID) systems that meet their specific needs. Whether it's international speedways, NFL stadiums, San Francisco's Bay Bridge, the Statue of Liberty, or some of the largest and busiest ports, airport terminals and transportation hubs in the world; innovation and customisation is at the heart of Musco's solutions.

Musco takes a lot of pride in the way it works with partners to engineer solutions that meet specific needs. Whether it's a system with an LED or HID light source, Musco's lighting solutions not only cut off-site spill and glare, but dramatically reduce energy consumption and virtually eliminate maintenance headaches thanks to an industry-leading long-term warranty programme that includes parts and labour.

## DP World Jebel Ali Port Terminal 2

When Musco partnered with DP World to light its Jebel Ali Port Terminal 2 in Dubai, UAE—one of the largest ports in the Middle East—the project presented a number of challenges. DP World knew Musco was up to meeting those challenges, having partnered together just a few years earlier on the lighting project at Jebel Ali Port Terminal 1—a project that saves DP World US\$1.5 million annually.

As with that initial project, energy consumption at Jebel Ali Port Terminal 2 was massive, and spill light and glare were excessive. Furthermore, maintenance costs were expensive and time consuming. Covering nearly 195 hectares and with operations taking place at the port twenty-four hours a day, DP World

was facing the kind of lighting challenges most corporations can barely imagine.

The team at Musco knew that Jebel Ali Port Terminal 2 needed a customised solution that would provide higher quality and more efficient lighting, lessen its environmental impact, and reduce costs. It also knew that, no matter what kind of new lighting was to be installed, the installation would need to happen while the port remained operational—a huge challenge in and of itself.

Musco's Green Generation Lighting® system with an LED light source was the answer. Musco worked closely with the DP World team to strategically aim the LEDs to the sides of stacks and roadways; helping truck and lift operators see the containers better, making loading and unloading at the terminal safer.

As one of DP World's first terminals to use LED lighting, the customised system delivered by Musco reduced operating costs by 66%—a savings of more than \$2.9 million over the next 15 years. These savings will enable DP World to pay off its initial investment in the new system in less than four years.

## Port Everglades Intermodal Container Transfer Facility

When the Florida East Coast Railway and Port Everglades joined forces to form the Intermodal Container Transfer Facility (ICTF) it was a massive undertaking. It would streamline the processing of containers from ship to rail, expand capacity, and provide quicker transit times.

Covering more than 17 hectares, the ICTF is a state-of-the-art facility that needed the best possible lighting system as a way to meet its overall mission of being environmentally friendly and keeping costs low.

When the ICTF, located in Fort Lauderdale, Florida, USA, partnered with Musco to design, engineer, and install the lighting system at the facility, there were a number of key priorities. The lights had to reduce energy consumption and operating costs, while delivering the light quality

necessary to provide the safest possible operation for workers. At the same time, the lighting system had to be designed in a way that would not interfere or disrupt activity at the nearby Fort Lauderdale-Hollywood International Airport—one of the fastest growing airports in the United States.

Musco's customised lighting system utilised an HID light source for the ICTF which offered a complete solution that achieved all of its goals. The Light-Structure Green® system was designed and installed in its entirety by Musco—from foundation to pole-top. This unique system approach to lighting ensured superior structural integrity in a small footprint, optimising usable space around each pole.

Musco's system is backed by a comprehensive 10-year warranty which eliminates maintenance, guarantees constant light levels for safer operations and provides system performance monitoring. This is all backed by a global team of trained technicians.

Musco's advanced reflector design optimises the light on the surface, helping the ICTF reduce its energy consumption by 55% compared to a typical lighting system. Over a decade, total energy and maintenance costs will be slashed by more than \$800,000.

## Global Container Terminal

The Global Container Terminal in Jersey City, New Jersey, USA, features 40 hectares of fenced, lighted property, including nearly 32 hectares of marshalling areas for containers mounted on chassis and container stacking areas. It is one of the busiest facilities of its kind in the United States and its top priority is the safety of workers and vessels coming into the terminal.

When it was determined that a new lighting system was needed to help ensure safety and cut costs, leaders at the Global Container Terminal knew that Musco would provide the most innovative lighting solution. The new

Port Everglades ICTF-  
Fort Lauderdale, Florida, USA



DP World installed Musco's LED lighting solution at Jebel Ali Port Terminal 2, reducing energy consumption by 66%

DP World will save \$2.9 million over the next 15 years with Musco's LED lighting solution at Jebel Ali Port Terminal 2



lights would need to reduce off-site spill light and glare, cut down costs, improve energy efficiency and provide the best lighting possible to help ensure safety at the facility.

The Musco team designed a custom solution with its Green Generation Lighting® using an HID light source mounted onto existing poles at the terminal. With Musco's advanced reflector design, the luminaries were strategically aimed with pinpoint precision to ensure that the loading and unloading areas at the Global Container Terminal had the proper light levels all day round, while eliminating spill light and glare in other areas.

### A proven history

No other company in the world has

brought more vision, innovation and commitment to providing complete lighting solutions than Musco. Whether it's the largest ports and terminals in the world, major sports venues, or iconic national monuments, customers turn to Musco because it's a proven path to lower operating costs, reduced energy consumption, premier light quality, and the most personalised support and service in the industry.

Musco's global team of experts is dedicated to always being there for the customer. From evaluating the benefits and determining the best system for a customer's needs, to the design, installation, maintenance and monitoring, its systems and services provide a cost-effective, trouble-free solution for customers for many years.

### About the organisation

For nearly 40 years, Musco Lighting has specialised in the design and manufacture of sports and large area lighting solutions around the world. Musco has pioneered systems using metal halide and LED technologies that have made dramatic improvements in energy efficiency and provided affordable ways to control spill light and glare. Permanent and temporary lighting solutions range from neighbourhood 'Little League' fields to Olympic Games. Musco has a global team of experts that partner with customers to plan, complete, and maintain a cost-effective, trouble-free lighting solution for their facility.

### Enquiries

[www.musco.com](http://www.musco.com)  
[lighting@musco.com](mailto:lighting@musco.com)