

# Total Terminals International (TTI)

Established in 1991, TTI is a full-service marine terminal and stevedore operator. It's part of Terminal Investments Limited, which in turn is owned by the Mediterranean Shipping Company. TTI has ownership interests in over 37 terminals worldwide – including Pier T at the Port of Long Beach.

Their Pier T operation was designed for maximum efficiency and productivity. It has the capacity to process more than 3,000,000 Twenty-foot Equivalent Unit (TEU) vessels a year. It's also outfitted with some of the world's largest gantry cranes and the biggest cranes at any USA port.

## The challenge

TTI needed to:

- Replace the 1,400 high mast 1,000W metal halide lighting fixtures to cut energy, operational, and maintenance costs.
- Keep the number of luminaires exactly the same as before.

This was a complex challenge as it also involved the winner of the tender:

- Commissioning and installing the lighting system.
- Making the necessary rebate applications by the end of the year.
- Delivering Underwriters Laboratories (UL) compliant lighting.
- Getting a Port Permit from the Port of Long Beach – a long and complicated process.

## At a glance

**Sector:** Maritime  
**Customer:** TTI Total Terminals International  
**Location:** Pier T, Port of Long Beach, USA  
**Max Capacity:** 3 million TEU per year  
**Project date:** 2018

**LED floodlights installed:** 1,400  
**Type:** Atlas Series – 300/600  
**Energy Savings:** 60%  
**Lux average values:** 35 Lux  
**Payback:** 1 year – including project rebate



## Our solution

This is when our very successful and versatile Atlas Series was born – with design to prototype to UL certification taking less than two months.

- The made for purpose 330W and 660W Atlas lighting fixtures were designed to be robust enough to cope with the hostile conditions, and be highly efficient at the time.
- By combining them on one pole, they were able to deliver the require illumination at the lowest possible energy consumption – around 500W.
- And once installed, the increase in colour of the light achieved increased the visibility of any hazards and made the port a much safer place to work.
- The Series also achieved the Port of Long Beach Port Permit needed for the project to succeed.
- Our rebate application for TTI was delivered on time and successful. So, TTI received a significant contribution to the total project costs from their energy provider.

Overall, TTI now have a high quality, high output, and highly efficient lighting system at a cost-effective price – with superior customer service they can call on at any time.

## Before and after technical comparison

- UL certified and DLC listed.
- Proprietary high asymmetry optics provide a low glare solution.
- Versatile bracket and adapters to fit any existing mast infrastructure for ease of install and quick retrofit applications.
- Modular design allowing for versatile applications and solutions.
- Integrated drivers for high reliability and ease of installation.