

# The Port of Venice



The Port of Venice (PoV) is located at the end of the Po Valley in Northeast Italy.

It's the eighth busiest commercial port in the country and is one of the most important in the Mediterranean for the cruise sector. The Port of Venice is also included in the list of leading European ports that are located on the strategic nodes of Trans-European networks.

In total it covers an area of more than 2,000 hectares and has over 30km of quaysides.

## The challenge

The Port of Venice came to us because they needed to replace the metal-halide lighting on their mobile harbour cranes. This was due to:

- Their current system, with its 2kW floodlights, being highly inefficient compared

## At a glance

**Sector:** Maritime  
**Customer:** Port of Venice  
**Project date:** June 2020  
**Total number of cranes:** 4

**Type of Floodlight:** Docker 300  
**Lux average values:** 200 Lux  
**Uniformity:** >0.6  
**Energy savings:** 70%

to LED lighting. So, a new system would cut their energy use and save them a considerable amount of money.

- The Port of Venice needing to cut the amount of time and money they were spending on maintaining the lighting system they had. With crane lighting the issue of maintenance is magnified as the vibrations made when a crane is in operation can easily damage a floodlight's moving parts. With our solid-state LED solutions this isn't a problem, so maintenance and downtime are kept to an absolute minimum.
- The lighting levels achieved with their metal-halide system not being as good as they should have been, and that this could cause operational and safety issues.

## Our Solution

We proposed to replace their metal-halide floodlights with our Docker 300 luminaires. Manufactured with 316 stainless steel to resist corrosion in harsh marine conditions, the Docker Series has been designed for applications needing high performance and durability. Also, thanks to its proprietary asymmetric optics, it can give a light coverage four times greater than traditional symmetric lighting. Its optics mean crane operators can see much deeper into container ships, making it far easier to load and unload them too.

The first step in the project was to prove to The Port of Venice how effective Docker 300 lighting was. So, we worked with their engineering team to retrofit seven high masts with Docker floodlights. The Port of Venice was delighted with the results and we moved to the next phase – replacing the crane lighting.

To do this, due to the way their harbour cranes were built, we had to ensure the floodlight brackets could allow for tilting. Which we did. This meant the lights could stay parallel to the ground whilst the crane boom was moving. As we were replacing each 2kW lamp with two Docker 300 luminaires, a special fixture was also developed to hold two Dockers in place on a single fixing point.

We've now upgraded all the port's crane lighting and The Port of Venice are now saving money through energy savings and lower maintenance costs whilst vastly improving the lighting levels for their crane operators.