

# Port

industry

LNG HANDLING

*Game Changer*

2015 LOW-SULPHUR FUEL REGULATIONS

## KEY EXPANSION

BOW TERMINAL MEETS NEEDS OF THE MARKET

First Dutch LNG Training Facility

EUROPEAN EMERGENCY REGULATIONS



An ASC at Rotterdam World Gateway illuminated by Phoenix ModCom Hi 300W LED floodlights.

#### TECHNOLOGY CHECKLIST

# Choosing the Right LED Fixture

THE BENEFITS OF LED TECHNOLOGY ARE INDISPUTABLE. ACCORDING TO PHOENIX – DESIGNER AND MANUFACTURER OF LIGHTING FIXTURES FOR SOME OF THE WORLD'S HARSHTEST ENVIRONMENTS – THE EFFICIENCY, LIGHT QUALITY AND MAINTENANCE SOLUTIONS HAVE revolutionised lighting at ports around the world. But after the choice to illuminate with LED is made, how do you find the right fixture among the array of options? In order to protect your investment, there are some important things to consider about the fixture design and manufacturer.



## Every Component Part Matters

For the first time in history, there is a light source that can outlast the assembly of most fixtures. As a result, lighting manufacturers must consider the wear and tear their products will undergo during the long lifetime of the LEDs. There is a large number of fixtures being put onto container handling equipment that will fail before the end of the typical 50,000+ hour rated life. The cause of the failures will likely have nothing to do with the LED. It will be a different component such as the driver, housing, lens or a poorly designed heat sink.

## Versatile for Customised Light

Having a variety of optic options is crucial in customising a lighting package that is perfect for a specific application. Without the proper optics, there will be inadequate light distribution. In order to maximise resources, a reputable manufacturer should conduct studies to determine an optimised lighting design for the facility.

## Repairability is Critical

High-quality, well-designed fixtures should also be repairable. For example, if an LED module needs to be replaced, it is best if it can be done in the field. If a component fails on a fixture that is difficult to repair, the light will likely need to be uninstalled and sent back for repair or, even worse, it could be a total loss. People may also see manufacturers designing fixtures that can be

retrofitted as technology advances and offers even more efficiency. For example, a module that draws 25W may eventually be replaced with a 15W module as efficiency reaches higher levels. Thus, your investment can be maximised.

## Specialisation & Support is Critical

Although most lighting manufacturers serve multiple industries, Phoenix believes the port market should look for manufacturers that exhibit dedication to the port industry. This includes R&D efforts, as most fixtures designed for alternate

applications will not survive the challenges of container handling equipment.

Determination of the best lighting package for a terminal facility should be based on solid industry experience. Also, consider the after-installation support of the fixture manufacturer. A reputable manufacturer should provide an accessible support team that can answer questions, provide technical expertise and ensure parts are readily available.

Technology in the lighting industry continues to soar. The advantages are endless if an informed decision is made in the beginning.



## Checklist for Purchasing Port Lights

- Challenge lighting manufacturers to prove and stand behind their claims.
- Ask questions about the driver and LED brands to confirm they are reliable with a proven performance records.
- Enquire about the materials used for the lens, housing, hardware and mounting parts.
- Check that the manufacturer can explain the key components of the fixture and how it will withstand the rigours of the application.

[I. www.phoenixlighting.com](http://www.phoenixlighting.com)