MIDSTREAM

Advanced Floodlighting

Ports & Terminals

Lighting solutions for ports and marinas

Port and Marina lighting is essential to the safety, security and smooth operation of all port and marina sites.

Whether the application is an international container port or a local marina, good quality, reliable illumination allows successful marine navigation and enables land-based personel, vehicular traffic and visitors to find their way around shore-side road infrastructure, and along jetties, docks and terminals - vital at night or during poor weather conditions.

In addition to quality, reliability and power, marine establishments are increasingly taking into account light distribution vs energy consumption equations, light pollution, size of fittings and accessories, bulb life, and low maintenance.

Midstream is trusted by the world's busiest terminals to design and deliver sustainable lighting systems to meet demanding legal, regulatory and operational requirements.

Ports & Marinas

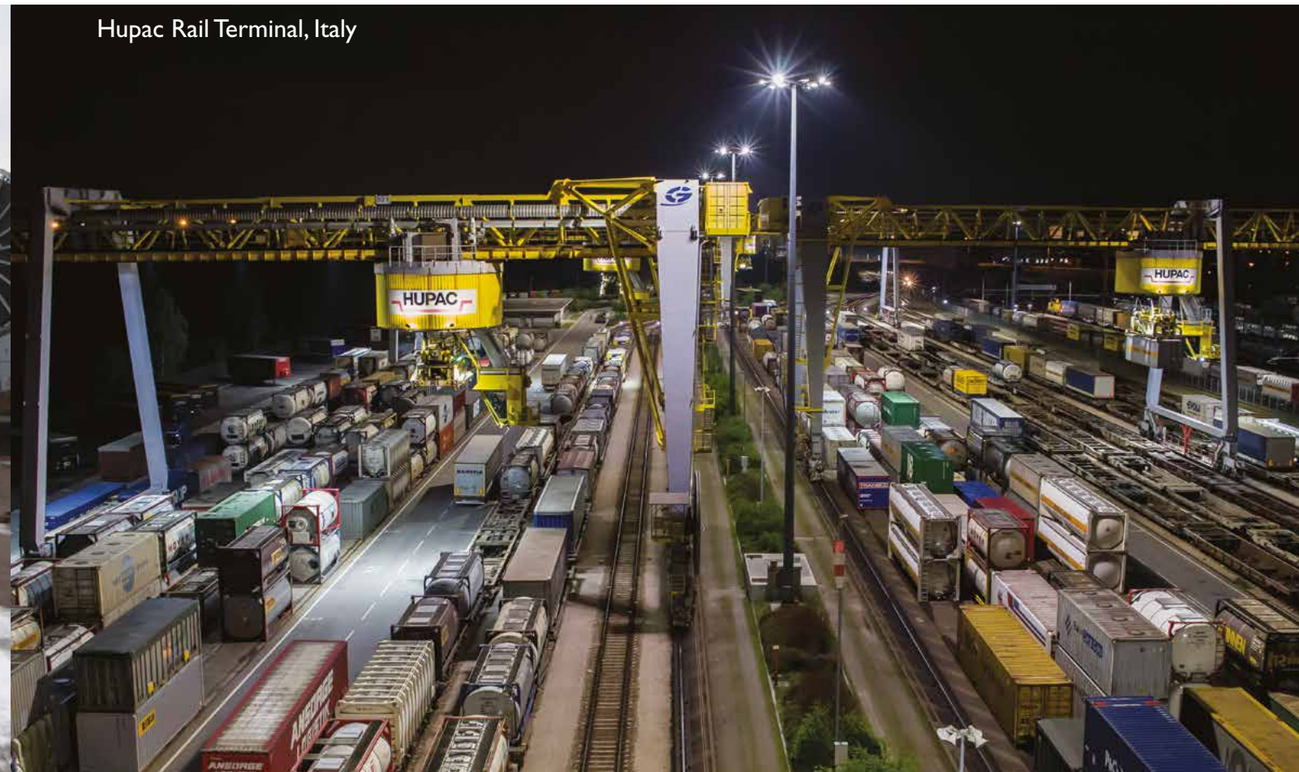
Global experience, local knowledge

We have experience in delivering port lighting and large area lighting solutions to major ports and terminals, internationally. Working in collaboration with our customers and their stakeholders, we deliver solutions that are trusted worldwide.

Our projects include

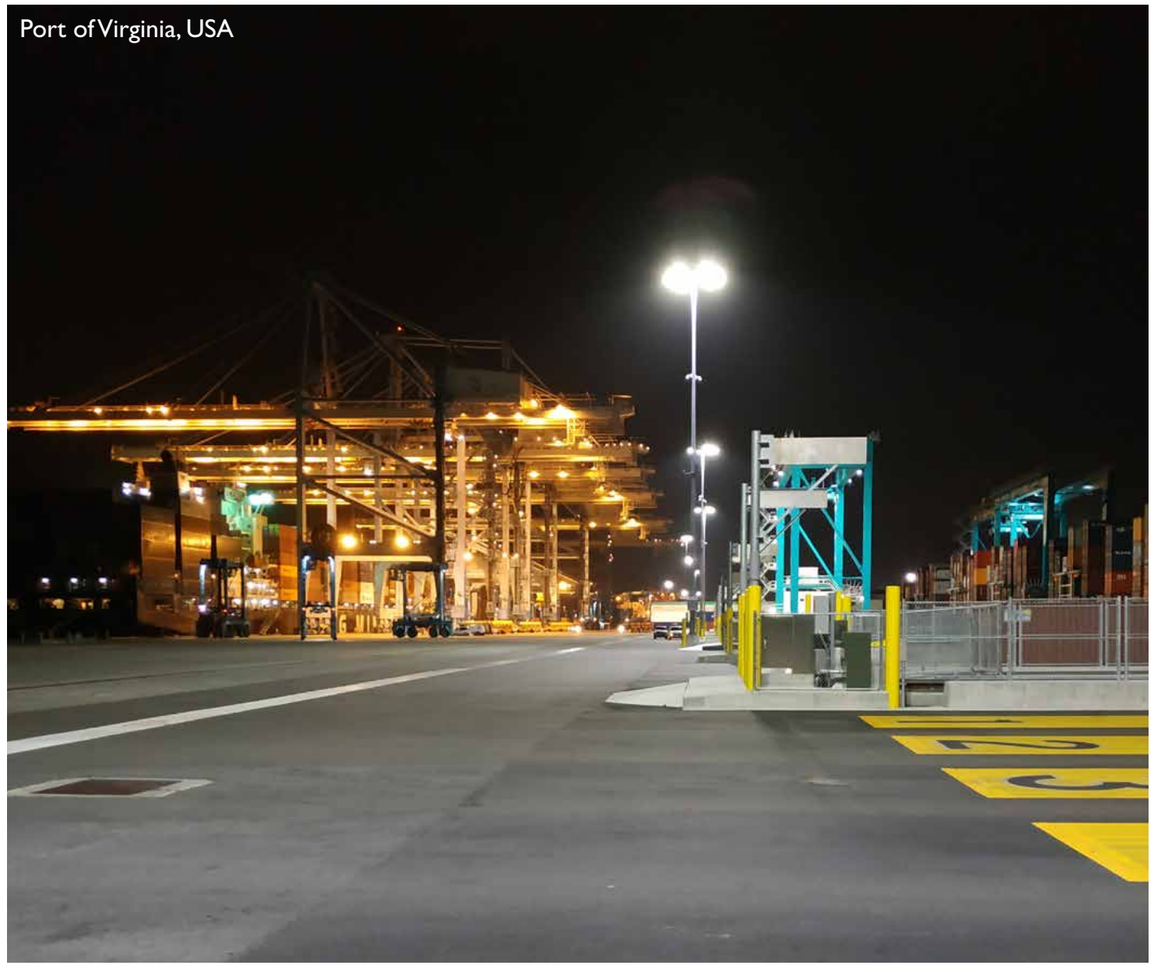
Port of Tyne	UK
PSA Breakbulk, Antwerp	Belgium
Port of Virginia	USA
Port of Long Beach	USA
PNCT, Port of New York	USA
AB Ports	Various
APMT Framework	Framework
Smålandshamnar AB	Sweden

Port of Felixstowe	UK
Port of Yuzhniy	Ukraine
Trieste Intermodal Terminal	Italy
Hupac Terminals	Italy
Aarhus Port	Denmark
Belawan Terminal	Indonesia
Cairnryan Port	UK
Remarail Terminal	Mozambique



Hupac Rail Terminal, Italy

Midstream in action: Port lighting


Port of Virginia, USA


RoRo terminal, Netherlands

Port of Tyne, UK

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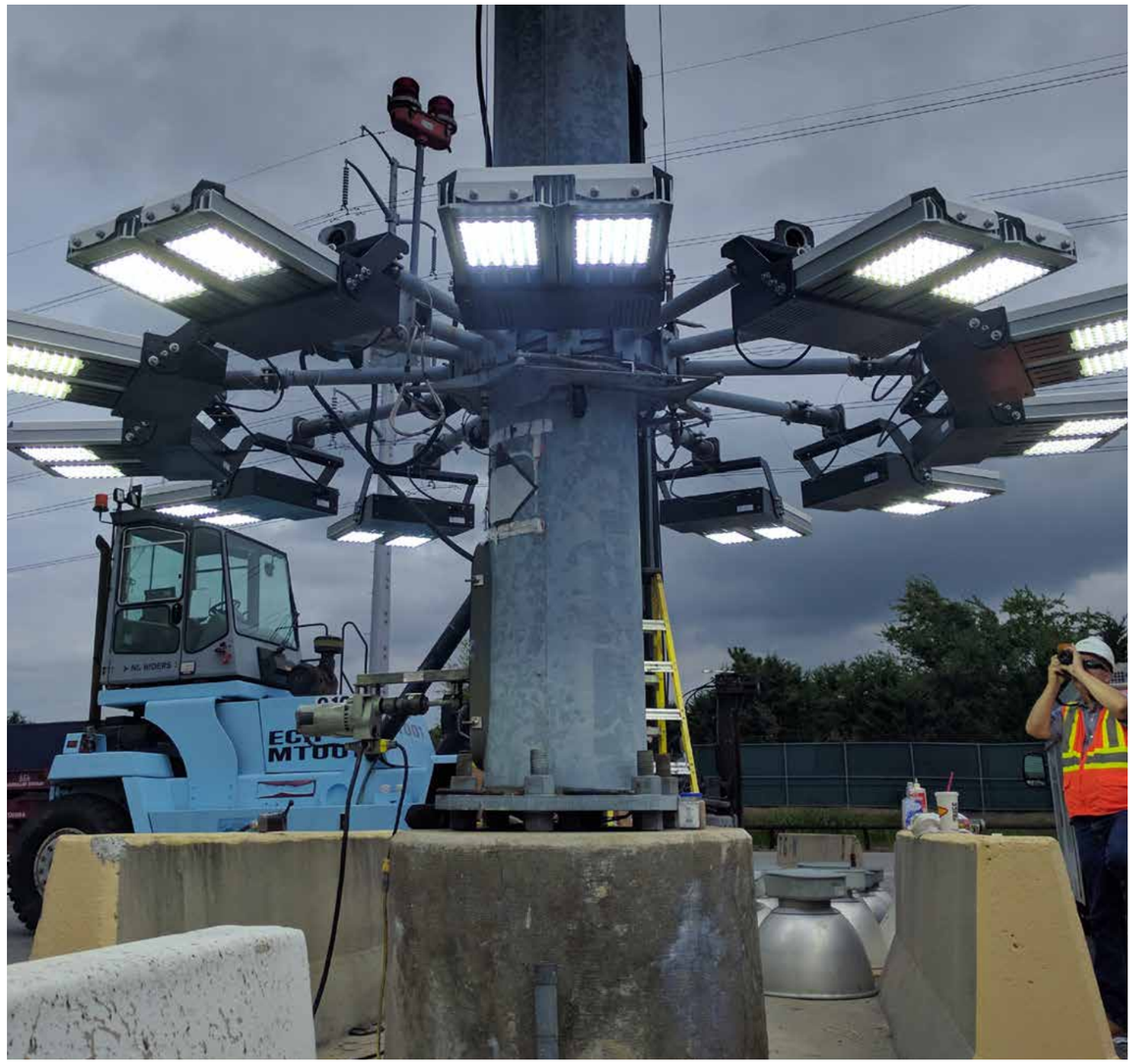
Smålandshamnar, Oskarshamn, Sweden


Port of New York, USA

Case studies



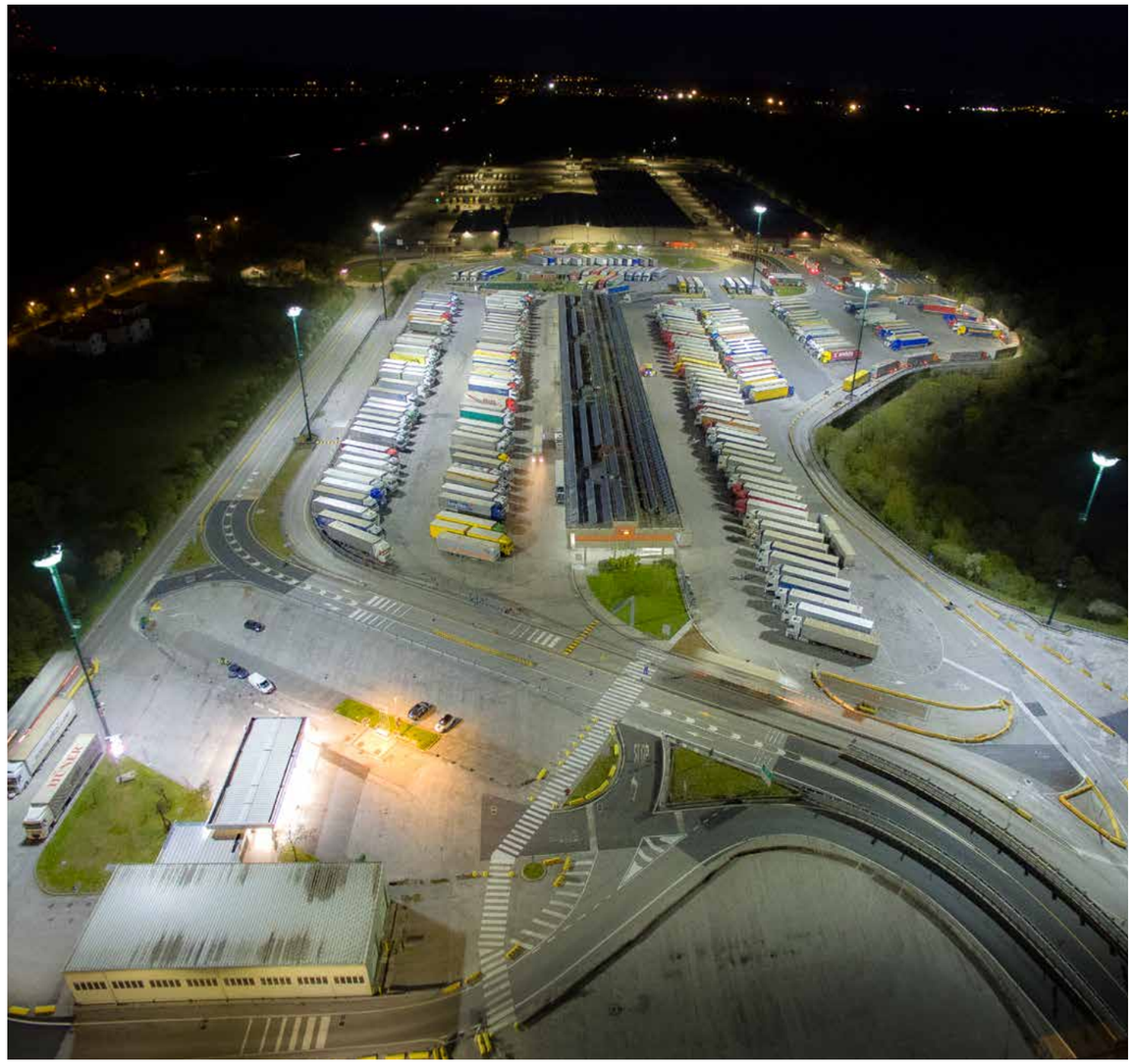
Port of Virginia, USA

This brand new terminal expansion required Midstream to work with the design consultants to optimise the mast layout, which led to significant savings in constrcution costs.

Midstream was selected by the prinicipal contractor to provide the floodlights to be installed on new Holophane masts. Additionally, Midstream provided a wired control solution to allow for the remote dimming of the luminaires.

One of the key benefits of the proprietary refraction-based optic systems, apart from reduction in mast numbers, was that glare to the water-side was minimised, ensuring that waterway traffic was not distracted by the terminal's lighting.

Ports & Marinas



Intermodal Terminal of Trieste, Italy

Intermodal terminals operate on a 24/7 basis and lighting is a critical component for operations, security, health and safety and CCTV monitoring.

Midstream was awarded the contract to upgrade the poor and costly lighting to LED technology across all the 37.5m masts. The new lighting scheme delivered energy savings in excess of 70%. Additionally, the refraction-based optic systems allowed minimisation of upward light, ensuring that neighbouring areas were not disturbed by the terminal's lighting.

The terminal manager Oliviero Petz stated, "We are extremely satisfied with the quality of the lighting products as well as the service and after-service offered by Midstream. We continue to cooperate with Midstream on other lighting projects and highly recommend others to do so."

Retrofit

Our solution has been designed specifically to allow for fast and efficient installation of the luminaires to existing mast infrastructure.

The plug and play features provide for safe mounting, maintenance and demounting, whilst the adjustable bracket allows for multiple arrangements on all types of heads and crowns.

All our luminaires are supplied with an IP68 quick plug, avoiding the need for rewiring the lighting system.

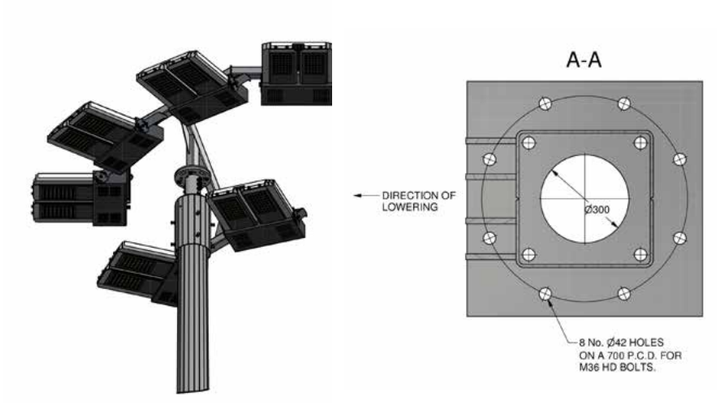
Our luminaires easily integrate with a wide variety of controls systems through 1-10v, DALI or NEMA socket interfaces.

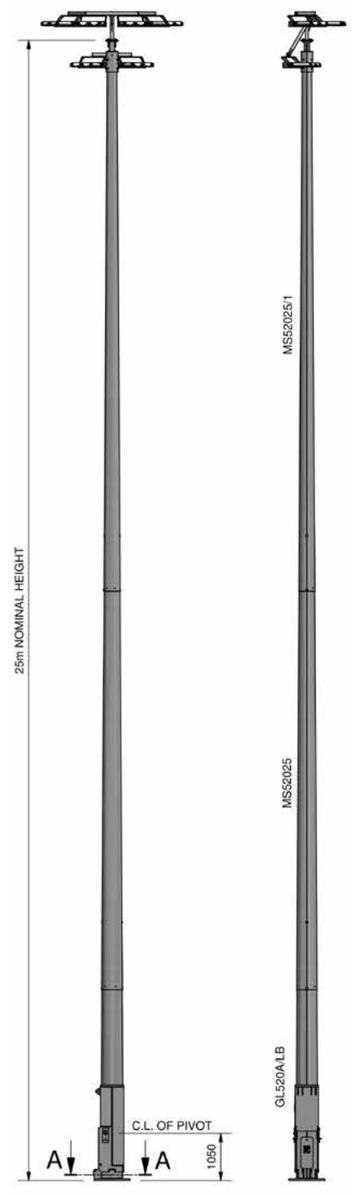
New High Masts

Midstream frequently works with its international supply chain to provide new high masts in line with the customer requirements whether these are Raise and Lower, Static, Frangible or with a platform and ladder (towers).

Midstream works with mast manufacturers directly to ensure that wind loading and stress calculations are specific to the site and requirements of the lighting scheme, which delivers a high quality, bespoke solution.

In certain cases, Midstream can deliver turn-key installation projects utilising an approved network of contractors.

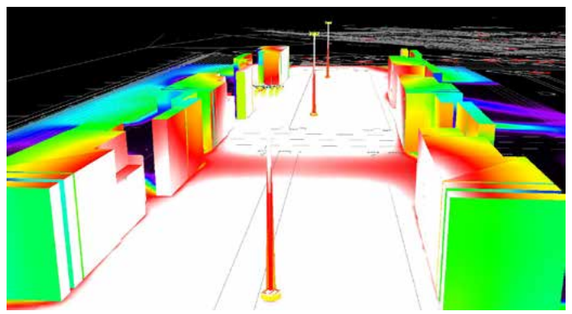




Design Experience

We have a very experienced in-house design team that generates compliant designs for port and marina projects, whether newly built or for retrofitting projects.

Our team has designed and delivered projects in ports around the world, from the USA to Indonesia. We work for global operators as well as major engineering practices to advise on and implement LED floodlighting projects, which means your next project is in sage hands.

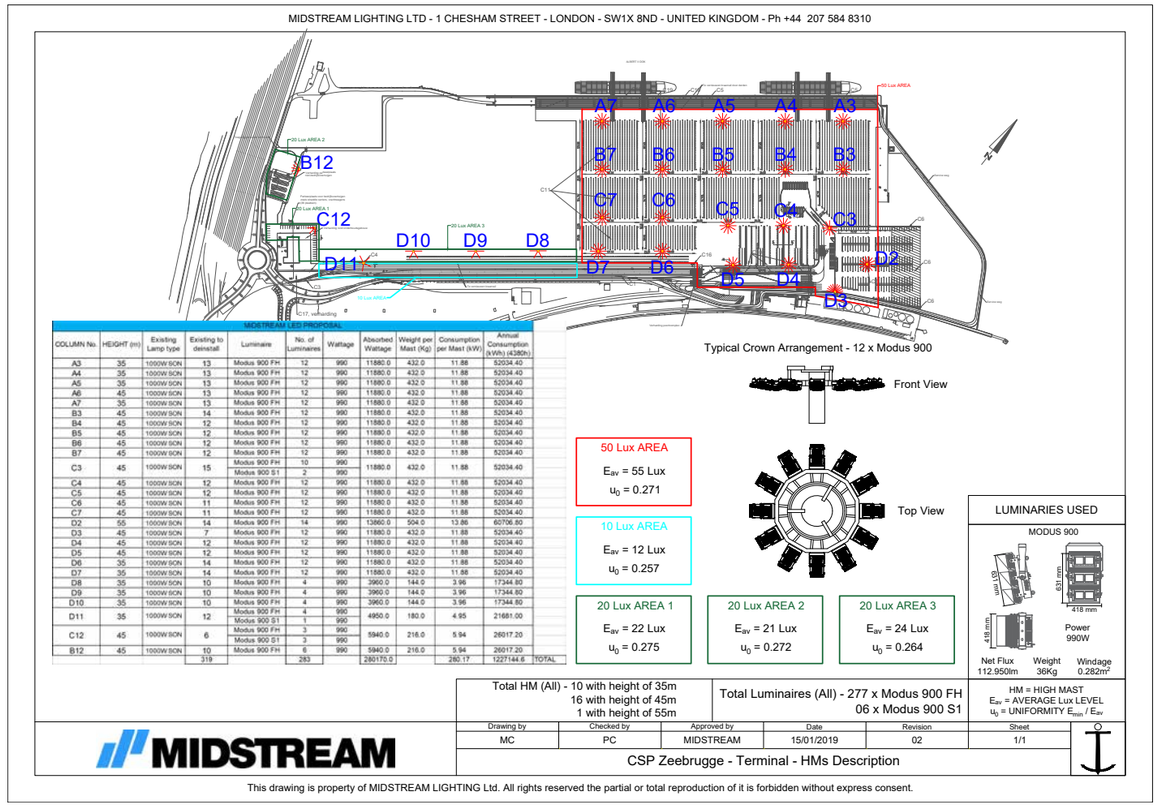


Our in-house design team was involved in the development of our proprietary refraction lens, and have unique know-how in creating designs for the most challenging environments.

Documentation

We offer a full lighting package to our clients, which includes a fully compliant design to international standards with an itemised list of luminaires, complete installation and maintenance guidance, as well as detailed mounting angles to support the installation teams.

The package includes a lux value chart and a financial investment analysis model. As-built drawings can also be provided on request.



Our mounting instructions provide installation teams with precise aiming guidance as well as detailed arrangements of luminaires on the mast heads, avoiding any room for error, and assuring compliance with the initial lighting design.

LED Port lighting pioneers

LED technology for high-power lighting is known to all but mastered by very few. Midstream has been a pioneer in this field from the beginning.

The challenges of delivering products with very high power and advanced thermal management properties, at a cost that is economically viable, has been the research focus of Midstream from it's foundation.

Those challenges have been successfully met with a suite of proven LED products which tackle mission critical applications such as ports and airports.

Titan Series

Highly assymetric, integrated driver, premium solution for ports in masterplanning or reconfiguration stage.

Stainless steel construction, 2-stage 20kV surge protection for extreme conditions. Extruded radiator delivers superior performance in hot climates.

Atlas Series

UL Listed, versatile modular LED floodlight designed for retrofit solution in multiple configuration such as symmetric, asymmetric, integrated or remote driver. Ideal solution to replace up to 2kW discharge lamp floodlights.

Stainless steel construction, remote or integrated drivers with IP67 mounting box, versatile bracket and adapters to fit any existing mast infrastructure makes this product the right solution for retrofit projects.

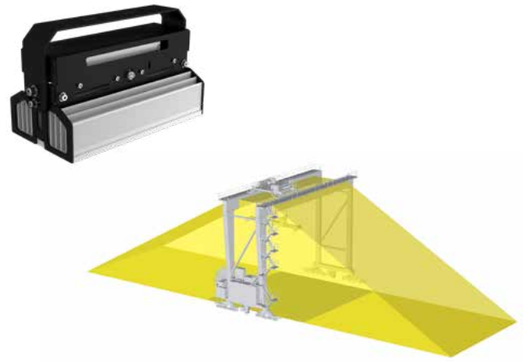
Docker Series

A range of heavy duty LED floodlights designed for applications requiring high performance and long durability, therefore ideal for use on cranes in ports and harbours. Docker Series floodlight chassis are built from full AISI 316 stainless steel, which will resist the harshest of environments and ensure maintenance-free operation for mission critical applications.

RTG Cranes

Maximise visibility, increased productivity

A wide range of optics makes this the perfect luminaire solution for any size of container stacker cranes. Midstream's proprietary asymmetric optic 'FH' guarantees a wide coverage along the crane path plus high vertical illuminance for improved obstacle recognition and maximum safety of stack areas. This asymmetric emission allows light to cover an area x 4 larger than traditional symmetric optics, without the need for additional front facing floodlights – resulting in a glare-free installation.



STS Cranes

A new standard in safety

Midstream can provide bespoke lighting layouts for each type of crane, using the optimum optic to lower glare, increase uniformity and avoid any dark spots on the ground. The asymmetric optic emission provide first-class vertical light levels, to ensure the pilot always has excellent visibility of the container on all sides.

Mobile Harbor Cranes

Built to last

A sturdy stainless steel chassis surrounding the optic resists continuous vibrations. Fixing brackets are designed with 4-point locking mechanisms, to ensure the aiming precision of the light beam. Superior optical performances ensure safet illuminance levels surrounding the crane, while symmetrical optical beams highlight the cargo handling area.

MIDSTREAM

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