

Bristol Port



About Bristol Port

Offering the most cost-effective end-to-end logistics solution of any UK deep sea port, and giving access to over 43 million people within a 250km radius, the Port of Bristol is a truly international hub. The port is also a key national asset, contributing more than £1 billion annually to UK GDP.

Bespoke design for a non-standard crane

Bristol Port's conveyer-belted Ship Loader/Unloader crane has been repeatedly upgraded over the years: there's no longer anything standard on this critical piece of kit. As a result, maintenance is always an issue and change can be a high cost and complex undertaking.

So when the crane's original sodium lights began to show their age, there was understandable concern – but action needed to be taken. The lights were unreliable, were taking valuable time to get to full power and energy costs were high. More importantly, challenging light levels were impacting operations and posing safety risks to personnel both on shore and onboard.

With an off-the-shelf replacement off the table, the Port's crane engineering partner Alatas put in a call to Midstream who, fortunately, is not your standard lighting provider.

Location: Bristol, England

Products and services provided:

- Design of a cost-efficient LED lighting solution for ship loader/unloader crane.
- Manufacture and installation of 8 Docker 150s and 14 Docker 300s.

Key achievements:

- Quality lighting system for a unique crane.
- Fully bespoke design with 3D modelling.
- Cost-effective, reliable and durable solution.

Modelling success

Following a site visit and creation of a precise digital twin to model lighting options and positioning, the team specified the Docker Series floodlight system. Designed for maritime cranes, these heavy-duty LED floodlights feature a high-grade stainless steel body and are tested for salt spray and vibrations up to 6G – perfect for the Harsh crane operating environment.

Not only do the Dockers offer precisely the right level of illumination in exactly the right areas of the crane and on the vessel, they are quick and easy to install. All of which matters when Alatas' engineers are working at height to do it.

In all, eight Midstream Docker 150s and 14 Docker 300s have been deployed and are now delivering cost effective, low-energy and maintenance free operation in this toughest of environments.

In the customer's own words:

Midstream Lighting took time to investigate the operation of the machine and the lighting requirements for vessel operation. They were able to come up with a lighting plan for the environment and machine use which allowed for machine use 24hours a day. They also looked at moving parts and possible shadows created to reduce and blind spots caused by shadowing. We are happy with visibility the new light system gives the operators.

David Hopton, Project Engineer