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# ShipBuilding

i n d u s t r y



## The Next Generation

MAERSK CONNECTOR

## VISION OF THE FJORDS

TRANSFORMING NATURE TOURISM IN NORWAY

## Paperless Ships

WAY OF THE FUTURE

# Hi-Tech LED Work Lighting



IN 2014 THE VIKTOR LENAC SHIPYARD FACED NUMEROUS DIFFICULTIES CAUSED BY TRADITIONAL, CLASSIC INCANDESCENT AND COMPACT FLUORESCENT WORK LIGHTING. THIS INITIATED A PROCESS TO DEFINE TECHNICAL characteristics required for a new low power consumption, portable, lighting solution for the yard.

The goal for the shipyard was to have a high-efficiency LED technology lighting solution. The new lighting system had to be applicable throughout various technical stages and work processes such as steelwork, sandblasting, high-pressure washing, anti-corrosion protection, and maintenance. The lighting also had to be robust to operate at 42-48VAC, and have IP66 and IK10 protection grades. The solution was found in the Gala LED lighting system – a portable safety work lighting system that can generate numerous savings in power consumption, lighting system installation time, on equipment and material, as well as maintenance.

### Significant Results

The shipyard installed the new LED system in 2015. Immediately after installation, performance was monitored and data collected to calculate cost savings and assess associated advantages. One particular analysis was

conducted on the tanker vessel, Johan Jacob. The vessel was repaired over a 75-day period at the yard using 1,800 pieces of work lamps. By the end of the repair project, Viktor Lenac calculated savings of over EUR 60,000 just on this single vessel.

The savings were generated on equipment and material due to less cables and distribution panels; on lighting installation time due to uniformed voltage level of lighting which doesn't require change between different technological stages, as well as on maintenance and power consumption which was more than 80% lower compared with previous, traditional lighting.

The positive results of the financial analysis after only one tanker project generated a positive return on the new lighting investment and subsequent projects have generated significant earnings for the shipyard.

**i. [www.datal.com](http://www.datal.com)**

The Gala LED portable safety work lighting system is developed based on vigorous requirements identified by shipyards faced with difficulties caused by traditional, classic incandescent and compact fluorescent work lighting. The Gala LED system operates at a safe, reduced voltage of 42-48VAC, which is in line with the statutory requirements for working in damp spaces and increases worker safety.

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*The goal was to develop a specialised type of safety work lighting applicable in dark, confined and damp ship hulls where working conditions are especially hard.*

In 2015, the three largest Croatian shipyards, Viktor Lenac , Uljanik and 3. Maj, all fully converted to the Gala LED temporary safety work lighting system, entirely developed and manufactured at DATA LINK's production facilities in Bjelovar.

