



“It is of utmost importance for us to have equipment and TOS that are fully integrated and make our operations as efficient as possible.”

ANDREW BOWEN
ENGINEERING DIRECTOR,
DP WORLD LONDON GATEWAY

The automated backbone of DP World London Gateway

The UK's premier logistics centre has just opened berth number two, giving it an initial capacity of 1.6million TEU. Kalmar automation solutions and Navis terminal operating system (TOS) are at the heart of operations.

Terminal

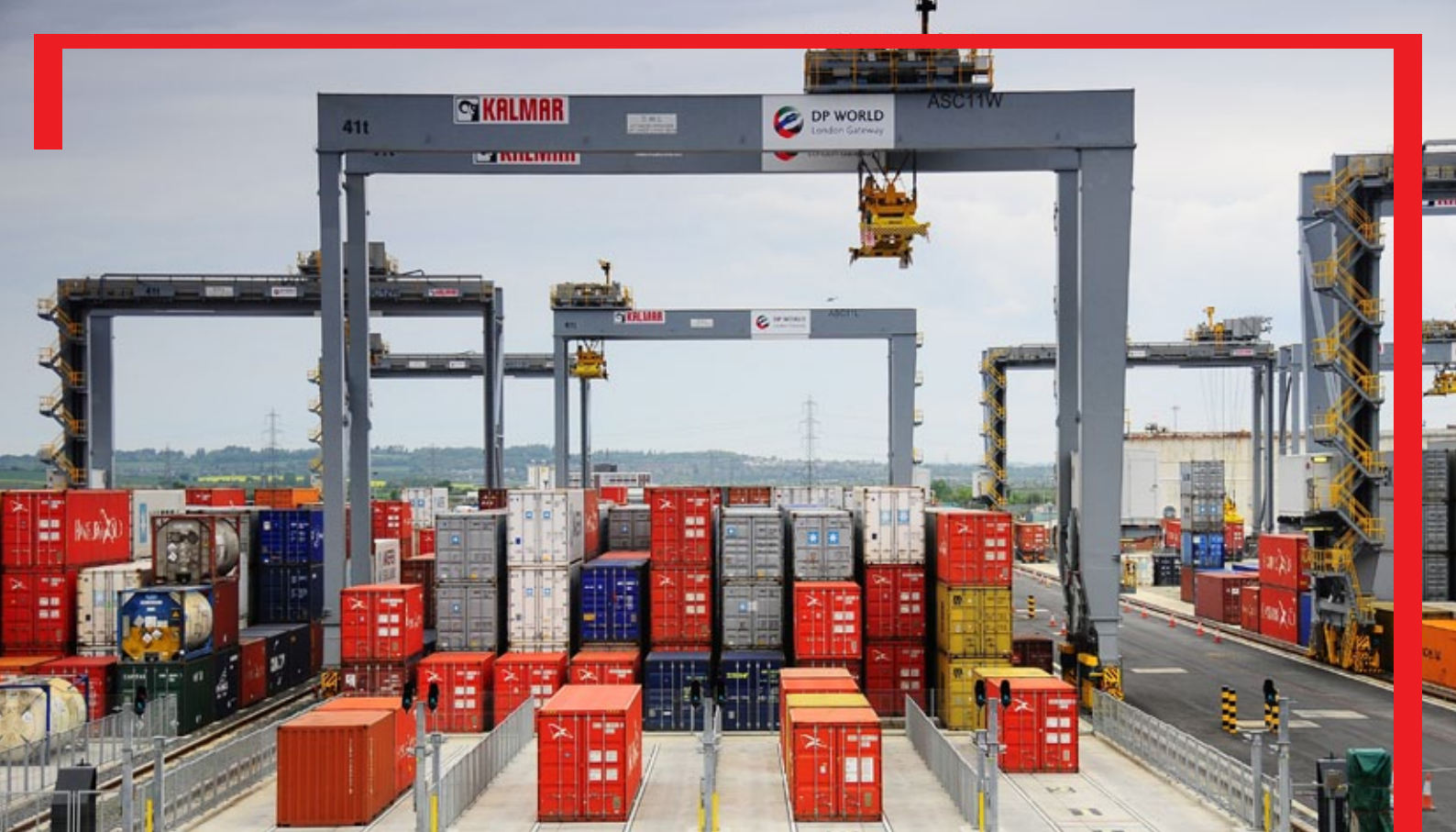
DP World London Gateway will provide at its final stage 2,700 metres of quay, six deep-water berths with depth alongside of 17 metres, 24 giant ship-to-shore cranes and an annual capacity of 3.5 million TEU. It will, once again, make London a hub for international trade, serving destinations much further afield. It will enable shippers from across the UK to make substantial savings by reducing delivery times, haulage costs, fuel consumption and carbon emissions.

Challenge

The challenge has been to develop a brand new port and logistics park with a focus on automation and how it can deliver maximum productivity, reduce operational costs and also be environmentally friendly. Currently there are few port facilities in the UK that can handle the new larger container vessels. DP World is specifically designing a facility to handle the largest vessels that are coming on line now and in the future.

Solution

Kalmar has provided a turnkey solution of 40 automated stacking cranes, automated truck handling and 28 shuttle carriers, integrated with Navis N4 terminal operating system, and supported by Kalmar reachstackers.



Technology

Kalmar ASC's are fully automated from waterside to landside interchange area and the shuttle carriers are also planned to move from manual to automated operation in the future. Kalmar Automated Truck Handling functionality automates the landside operation in the terminal. It uses laser sensors to measure the exact location of the truck trailer's twistlocks. It feeds the information to the crane, which automatically adjusts the position of the container for a perfect grounding onto the trailer. The Navis N4 TOS manages the transfer of containers to and from the adjacent logistics park and runs automated processes at its gate, the container yard and the rail terminal.

Added value

DP World London Gateway has adopted the latest automation technology from Kalmar and Navis, both part of Cargotec, to ensure a fully integrated solution, delivering optimum productivity and reduced operational costs.

The end to end automation achieved by integrating Kalmar ASC's and shuttle carriers with N4 TOS at London Gateway delivers added stacking density, scalability for increased volumes, proven safety, economy and security. Productivity is also enhanced through the equipment's ability to operate in high winds.

Results

DP World London Gateway, Kalmar and Navis have together produced one of the most efficient mega terminals in the world today. With a focus on high performance equipment and automated systems, the port is well set to meet its 3.5 million TEU annual capacity when completed. It will save UK businesses millions of pounds in land transportation costs with an estimated 65 million road freight miles saved.

Contact

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Kalmar is the industry forerunner in terminal automation and in energy efficient container handling, with one in four container movements around the globe being handled by a Kalmar solution. Kalmar is part of Cargotec.

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