

Port of Felixstowe



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The Port of Felixstowe, a member of the Hutchison Port Holdings Group, is the largest container port in the UK and one of the largest ports in Europe. Costain Limited was awarded a civil engineering contract worth £28 million to construct a major extension to the port's Trinity Terminal. The works included block paving 230,000 m² of additional container storage yard.

The challenge was to find a solution that would offer assurances of laying consistency and, on completion, would provide the port with a durable surface able to cope with the continual movements of heavy container-handling equipment and stacked container loads.

Marshalls secured the hard landscaping contract to supply more than 230,000 m² of its grey Keyblok concrete block paving in 200 x 100 x 80 mm units.

More than half the paved area was installed using innovative machine lay techniques, developed by Marshalls during extensive trials in partnership with specialist paving contractor Tolly Paving – the initial phases were laid by hand. For the areas that were laid with the aid of machines, the contractors used bespoke machine heads supplied by leading equipment manufacturer Probst.

During the most efficient phases of the machine lay process, three laying machines were employed side by side at the laying face, allowing each machine to install more than five times the amount of Keyblok that would have been possible by hand. The blocks were packaged in a 45-degree herringbone formation, with each machine head picking up and laying 64 blocks (1.28 m²) at a time. When a suitable area had been laid and sand applied, a sit-on whacker was then used to ensure the blocks formed an even surface.

Steve Attfield, Marshalls Commercial Manager said: "Marshalls' expertise, experience and knowledge, as well as the guarantees we offer, from product quality and supply to design and installation, were key to the project. Additionally, our partnership approach in applying innovative machine lay techniques to install Keyblok over such a large area was a crucial factor in securing and fulfilling this major contract."

The Port of Felixstowe now has an additional 23 hectare container storage area that benefits from a completely block paved surface, able to withstand the constant movement and load impacts of varied goods that are stored at a major cargo port.

The speed and efficiency of the machine laying techniques, developed by Marshalls and employed at the Port of Felixstowe, enabled vast areas of block paving to be laid by a minimal number of skilled operatives, in a safe and controlled manner.

Products Used:

- Keyblok 45° Herringbone Machine Lay (ML)5

Specialist involved:



Marshalls

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