



Herrenknecht

Case study

Project brief: ALS UK (International) Limited has transported a Herrenknecht Tunnel Boring Machine from Germany to the UK for the National Grid London Cable Tunnelling Project.

The 100 Ton EPB4000 TBM's dimensions were a maximum of 4.72m diameter and 110 metric Tonnes.

ALS' project team had to ensure that the machine was delivered within a tight deadline to meet the requirements of the consignee for the specified launch date of the TBM.

ALS arranged for the transportation of 5 x breakbulk components plus 17 standard trailer loads by road from Herrenknecht's manufacturing site in Schwanau, crane lifting from trucks to barge in Germany and from barge to trucks at ferry port, and onward transport by ro-ro ferry and road to job site.

The ferry company had to make special arrangements to accommodate this movement by shifting their ship to a special berth in Zeebrugge as the normal berth was not strong enough for the 183 gvw trucks.



Specialist beam/vessel carrier trailers were used to transport the Shield with Main Drive, and the Machine Can with Erector. This method was chosen to enable the largest components to be safely carried beneath restricted bridge heights.

The final leg of the journey involved 6 x police escort vehicles plus 3 x private escorts plus 1 x pilot car from Tilbury port via A13 and the M25 and through North London to the Haringey jobsite during late evening to minimise disruption to other traffic.

Comprehensive surveys were required in the UK to secure a suitable route, which avoided multiple bridge weight and height restrictions in East and North London.

A BE16 Special order Permit was secured from the UK Highways Agency, along with approvals from the Essex and Metropolitan Police forces, 4 local authorities, Network Rail, London Underground, British Waterways Board, and Transport for London.

It took 6 days for delivery of the main components (using a combination of road transport, barge, and ro-ro ferry) from Schwanau through to the London N4 jobsite where the TBM being is now being used for National Grid's new mains power cabling project throughout North London.

ALS

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