



Case study

Project brief: Movement of two Tunnel Boring Machines (TBMs) from Herrenknecht AG, Schwanau, Germany to Dublin City, Ireland. The two machines will play an important role in alleviating one of Ireland's major social and economic transport issues.

Heavy traffic is a major social and economic issue in Dublin City, Ireland. The Dublin Port Tunnel will provide a totally new, direct and rapid transit connection between the Port and the motorway system, thus alleviating the city's chronic traffic issues.

The complete road construction project totals 4.50 kilometres in length and the tunnel portion is 2.40 kilometres in length using a 107 m² tunnel face for the twolane cross-section in each direction. It will be constructed by two Tunnel Boring Machines each 11.80 metres in diameter.

This project required the movement of tunnelling machinery and equipment from Schwanau, Southern Germany to Dublin City, Ireland. In view of ALS' extensive experience in similar infrastructure projects, we were appointed as primary project managers for the entire TBM movement project.

The shipment consisted of 261 pieces, weighing the equivalent of 9,000 freight tonnes with the entire project comprising of two complete TBMs, including an indivisible section of 165 tonnes with a diameter of 6 metres.

After consultation with the client and a detailed review of how the shipment was to be effected, the ALS Special Projects Management Team developed a more cost effective and practical method of transportation, utilising the inland waterway system and specialist vessels.

As a result, ALS were able to transport directly from the factory in Southern Germany to the port in Dublin, Ireland minimising three important factors: COST and TIME and RISK.

This whole operation was a success. From Germany through to Ireland, moving in two phases, each complete machine took only 7 days to reach its destination utilising a total of five ships.

All movements were carried out on time, within budget and with no recorded damages.



1. Shield segment preparation at job site
2. Shield segment awaiting delivery
3. Cutter-head center on way to installation site
4. "Big Softie" ready to commence work