



LOVAT Manufactures 250TH TBM

Since its inception in 1972, LOVAT has been custom designing and manufacturing Tunnel Boring Machines, with over 700 tunnelling projects completed worldwide. Building on the past 36 years of innovation and success, LOVAT is proud to announce the recent completion of its 250th TBM.

Accepted by Costain Ltd. in January 2009, the LOVAT MP132SE EPB TBM will be used in the construction of Thames Water's West Ham Flood Alleviation Scheme in East London, UK. In 1987 Costain became one of the first contractors to use a LOVAT TBM in the UK. Costain's fleet of LOVAT TBMs has grown to five with this latest purchase.



The LOVAT TBM will excavate and erect tunnel lining for a 3,303 metre tunnel with a maximum grade of 0.5%. The TBM will pass under a local primary school, and was christened "Theodora" by one of its pupils. The geology anticipated along the tunnel alignment consists of Tertiary deposits including Woolwich & Reading, Upnor and Harwich Formations. The depth of cover above the tunnel crown level varies from 15m to 17m. The entire tunnel alignment is below groundwater. Groundwater heights above the tunnel invert level vary from 10m to 14m.



The 3.4 metre diameter Soft Ground TBM is equipped with Chromium Carbide Protected LOVAT Ripper Teeth and Scraper Teeth. The Cuttinghead Drive is hydraulic and consists of 2 x 188 kW water-cooled Electric Motors coupled to Variable Displacement Pumps generating maximum torque and speed values of 1,830 kN·m and 4.8 rpm, respectively.

To commemorate this milestone the TBM was painted in LOVAT's original colours. Following the completion of in-plant testing and client acceptance the TBM will be shipped to site, with excavation expected to start in mid-March 2009.

LOVAT will provide ongoing technical assistance and spare parts throughout the duration of the project.