



SUPPLY OF NEW EPB LOVAT TBM for John Holland Tunnelling

Melbourne Main Sewer Replacement (MMSR)



LOVAT is pleased to announce the recent signing of a contract to supply a new LOVAT RME115SE Earth Pressure Balance Tunnel Boring Machine [TBM] to John Holland Tunnelling. The TBM will be used in the construction of the Melbourne Main Sewer Replacement [MMSR] located in Melbourne Australia.

The 4 spoke chromium carbide plated Mixed Ground Cuttinghead is equipped with LOVAT Backloading Rippers (interchangeable with 15.5" Disc Cutters). The Cuttinghead is powered by a Hydraulic drive system (450 kW). Speeds range between 0 - 8.2 rpm with maximum torque of 1,040 kNm at 4.1 rpm.

Located in the Stationary Shell is a two stage, two chamber Integral Airlock. Which is outfitted with: an oxygen breathing system, pressure regulation system for maintaining a fixed set point of pressure to a maximum operating pressure of 4 bar.

The 2.92 meter diameter mixed face TBM will bore a total of 2,088 meters with a maximum slope of 0.12%. The entire tunnel alignment is below the groundwater level where heights above the invert vary from 9 metres to 11 metres.

Geology along the tunnel alignment consists of formations of Quaternary age collectively known as the *Yarra Delta Group* underlain by sequence of Tertiary formations. The basement geology of the site comprises folded Silurian sedimentary rock. These rocks generally occur well below the proposed tunnel alignment depth. The depth of cover above the tunnel crown level varies from 8 metres to 12 metres..

The TBM is scheduled for delivery during the first part of 2009.