

Project

The Metro Tunnel is a metropolitan rail infrastructure project for the City of Melbourne.

It includes the construction of twin 9 km rail tunnels from South Kensington to South Yarra with five new underground stations through Melbourne's central business district. The tunnel will create a new urban line from Sunbury to Pakenham and Cranbourne, bypassing Flinders Street Station and the City Loop. The line will reach Melbourne Airport from 2029.

The project will increase the capacity of the metropolitan rail system and improve the frequency of services on nine metropolitan lines in Melbourne.

Tunnelling works started in 2019 and were completed in 2022. The entire project is scheduled for final completion in 2025.

In 2019, Euroform has been awarded the supply of formwork for the lining of the metro stations in the Central Business District (CBD), characterised by a "trinocular" cavern layout with three overlapping tunnels, two for the rail tunnels and one for the central cavern, and associated accessories as listed below:

- 4 Modular tunnel formwork for lining the metro stations of the tunnel in the CBD area.
- Shutters for lining 5 adit sectors of the station tunnels.

All modular formwork is fully radio controlled.

The tunnel formwork is installed on a self-propelled gantry equipped with 4 motorised steering wheels.

The on-board concrete distribution equipment consists of a trolley and an articulated pipe system.

Each tunnel lining formwork is made up of several modules to allow switching between the central cavern layout (S.T.L.F.) and the railway tunnel layout (P.T.L.F.).

The gantry wheel sets are designed to allow not only the usual movement of the equipment along the tunnels but also a 90° rotation to allow easy transfer from one tunnel to another.

The adit shutters are designed to fit the station formwork and are made up of different elements that can be assembled in different ways depending on the adit to be concreted.

CLIENT

Cross Yarra Partnership (CYP) consortium

Tunnel formwork during factory test



Tunnel formwork on site



Tunnel formwork on site



Adit shutter fitted on the tunnel formwork

