

Crossrail - Elizabeth Line Power Installation

Best Practice Case Study



Project Data

Client : Crossrail

Location : London

Main Contractor : ATC

Completed : 2021

Project

ATC Systemwide is a joint venture between Costain, Alstom and TSO, were awarded the Crossrail contract,(to be branded the Elizabeth line) to design and install track, overhead lines and mechanical and electrical equipment and to fit out the 21 km of twin tunnels under the streets of London and surface sections of the Crossrail route between Royal Oak, Pudding Mill Lane and Plumstead Portals.

Scope Of Work

NCCT were successful on 3 individual projects under the ATC portfolio of works. An overview of the works carried out in each package is listed below -

HV Non Traction Power

- 220 km's of HV Cable installation including jointing and termination
- Installation to 36 new Substations & 52 associated transformers
- HV Cable installation at 18 Stations, Shafts and Portals from track level to Ground
- Installation of 7 HV Switch Rooms
- Testing and commissioning

HV Traction Power

- 52 kms of Tunnelling,CMS & HV Cable installed
- Construction of several auto-transformer stations and a feeder station site to provide a 25 kV supply to the overhead line equipment that power Crossrail trains.
- Installation of Positive and Negative Feeder Cable.
- Testing and commissioning

Tunnel Fit Out Works

- 44km of Electrical Mechanical and overhead line installed

