

Detailed scope of works
and Technical
Specification

25 kV Electrification of Adra - Midnapore section, 350 TKms, INDIA:-

IRCON completed the work of Railway Electrification of Adra - Midnapore section on South Eastern Railway of Indian Railways Network between Dec'1996 to Sept'2000. The work on the 350 TKM section with 13 stations had to be carried out under traffic blocks. In addition to Railway Electrification, complete work of two-nos. 132/25 kV Traction sub-station was carried out by IRCON. The Project involved complete Design, Supply, Erection, Testing and Commissioning of 25 kV polygonal type, SNCF design based self-regulating Overhead Catenary system with steel masts. Close coordination and interfacing with Railway Authorities was maintained in planned way to avoid disruption to the train operation. Main features of the Catenary system were:

- Swiveling type Cantilever assemblies with galvanized steel tubes.
- Three pulley type self regulating equipment
- Portals in station areas.
- 65 mm sq. cadmium copper Catenary wire
- 107 mm sq. electrolytic copper Contact wire
- ACSR Return Conductor
- Booster Transformers
- Two nos. 132/25 kV Traction Sub-stations
- Sectioning and Sub-sectioning Posts
- Disconnecting Switches



Large scale modification of existing catenary system on both ends i.e. at Adra and Midnapore had to be carried out for converting the unregulated tramway type OHE to regulated type OHE. Additional yard lines had to be electrified to ensure smooth operation of traffic.