

Detailed scope of works  
and Technical  
Specification

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**25 kV Electrification of Ambala – Khanalampura section, 285 TKms, INDIA:-**

IRCON completed the work of Railway Electrification of Ambala – Khanalampura section on Northern Railway of Indian Railways Network between Dec'1995 to March'2000. The work on the 285 TKM section had to be carried out under traffic blocks with 13 stations and two major yards. 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
- Sectioning and Sub-sectioning Posts
- Disconnecting Switches



Reinforced Concrete Tubular poles were used for the first time on Indian Railway in this section. This required development of suitable pole attachments for mounting of Cantilevers, Return Conductors and Earthing Connections.