PROJECT:

PRESTRESSING OF RADIAL GATE ANCHORS AT INDIRA SAGAR DAM

THE FREYSSINET Prestressed Concrete Company Ltd.

Admin. Office: 6/B, 6th Floor, Sterling Centre, Dr. A.B.Road, Worli, Mumbai-400 018
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PROJECT DETAILS

- Location Of Job:- Narmada Nagar, Khandwa (Madhya Pradesh)
- Nature Of Job:- Prestressing Of Radial Gate Anchors
- Owner :- M/S Narmada Hydroelectric Development Corporation Limited
- Design Consultant For Hydromechanical Works :- M/S Technopromexport Ltd. (Moscow, Russia)
- Sub Contractor :- M/S Gwallior Tanks & Vessels Ltd (Bhopal)
- Prestressing Sub Contractor:- The Freyssinet Prestressed Concrete Company Ltd.
TECHNICAL DETAILS

- Number of Piers: 19 Intermediate & 2 End Piers.
- Total Number of Trunion Girders: 20 Nos.
- Salima Steel Trunion Girder
- Total No of Cables per Pier: 16 Nos in Intermediate Pier & 12 Nos in End Pier.
- 1000 Mw Electricity Generation.
- Total No of Gates: 20 No’s.
- Size Of Gates: 20m X 18m
- Total No of Turbines: 08 Nos.
- Capacity of Electricity Generation per Turbine: 125 Mw.
- System Used: 27K15 Unbonded Tendons
- Sheathing Used: Mild Steel Sheathing (ID-125mm).
- 27K15 Guides In Shaft For Anchoring At The Dead End On Downstream Side.
- Cast Steel Distribution Plates In Trunion Girder For Anchoring At The Live End On Downstream Side.

SPECIAL FEATURES

- Unbonded Tendons were used for prestressing.
- K-700 Multipull Jack Used For Prestressing.
- Working Load In Each Cable at End Pier: 427 MT.
- Load In Each Cable at Intermediate Pier: 535 MT.
- Corrosion Protection Was Done By Greasing The Complete Tendons Using ‘Freyssi’ UT Special Grease after Prestressing of Cables.
- Grease Caps of 1000mm Length & Dia 300mm Were Used For Corrosion Protection of Strands Left Uncut For Future Prestressing.