

# Construction Techniques, Equipment and Practice

S. Christian Johnson



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# **Construction Techniques, Equipment and Practice**

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## Construction Techniques, Equipment and Practice

This book on “**Construction Techniques, Equipment and Practice**” covers various ingredients and works related with concrete technology including construction practices for setting out, earthwork, masonry, damp proof courses, flooring, etc.,. “Know how” on construction joints, building foundations, centering and shuttering, slip forms, scaffoldings, trusses, etc., have been discussed.

- Different types of sub structure components like caissons, diaphragm walls, Piles, Cofferdam, Cable anchoring and grouting-driving diaphragm walls, sheet piles - well points -Dewatering and stand by Plant equipment for underground open excavation have been presented.
- Launching grids, bridge decks, off shore platforms, special forms for shells, techniques for heavy decks, in-situ pre-stressing in high rise structures, including material handling, erecting light weight components on tall structures, support structure for heavy equipment and conveyors, erection of articulated structures, braced domes and space decks are some of the vital components covered under super structure.
- Selection of equipment for earth work, earth moving operations, types of earthwork equipment like tractors, motor graders, scrapers, front end loaders, earth movers, equipment for foundation and pile driving, equipment for compaction, batching and mixing and concreting , equipment for material handling and erection of structures, equipment for dredging, trenching, tunneling have been briefly attended.

**Dr.S.Christian Johnson** is presently working as Dean and Professor in Excel Engineering College, Kumarapalayam, Namakkal District, since July 2012. Earlier he has worked in different capacities in Central and State Governments organizations. He obtained his B.E (Civil) from Annamalai University, Tamil Nadu (1988 batch), M.Tech (Aero) from I.I.T Mumbai, Maharashtra (1990 batch) and MBA (HRD) from Annamalai University (2006 batch) and Ph.D in Civil Engineering from Anna University (2012 batch). He is the member of various professional bodies like ICI, ISTE, CIGRE and Fellow of Institution of Engineers. He has published several technical papers and case studies in Conferences, Workshops and in Journals both Nationally and Internationally. Presently he is the Secretary of one of the working group B2.65 of CIGRE (International Council on Large Electrical System), France, dealing with "Detection, Prevention, Repair of sub surface corrosion in overhead line foundations. He represented India as Chairperson, CIGRE National Study Committee B2 on overhead Lines at Trinity College, Dublin, Ireland during May 2017.



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