

Project: Design of Associated Facilities for Double Walled Ethylene Storage Tanks

Client: A world leader in Oil and Gas Industry

From Design to Delivery, in subsea, offshore and onshore structures our client is Pioneer in the design and construction of process units bringing together know-how, process engineering expertise and technologies. Present in 46 countries and spread on five continents, client is truly a world leader. Due to surplus work, client planned to outsource a major portion, to companies who can support them in structural design and drafting. Client requirement includes design of associated facilities for Double wall ethylene storage tank like piperack, different platform, pump foundations, compressor shelter and compressor foundation is to be designed and documented.



The past fifteen year's solid experience of Paradigm in similar fields build confidence in client, to consider us in design and drafting for associated facilities for ethylene storage tank.

Objective:

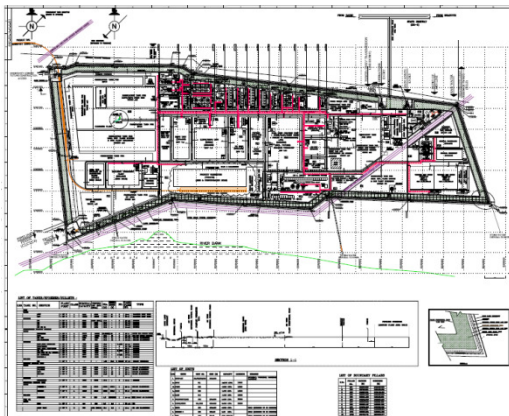
- To coordinate with piping and electrical engineers of the client for the conceptual design.
- To prepare design calculations using IS Codes, in similar lines to the sample templates provided by client.
- To provide design drawings, for PDS modeling in initial stage, and construction drawings at final stage.

Services:

- Preparation of design calculation spread sheets as per the standards provided by client
- Modelling FEM / 3D using Staad for all structures, including mat foundation.
- Detailed design reports made highly approachable, showing all information using screenshots from Staad.
- Ensured the ISO quality standards by 3 tiers checking of design and drawings.
- Dynamic analysis and design of compressor foundation.

Benefits:

- Highly detailed documentations with graphical presentation, helps in speedy checking.
- Well organised drawing with proper margin and right scale, gives clarity for site execution.



Overall Plot Plan

Software Used: Staad pro V8i, Autocad2011, Mathcad 14 and Microsoft Office.,

Technology: 3D-modelling, FEM analysis, Plate element modelling for foundation, Steel elements designed using STAAD Pro, Customized automated worksheets in Excel and Mathcad for design.

Design Codes Used:

Country: INDIA
Code Numbers: IS456, IS800, IS475, IS1893, SP16, IS13920 etc

Duration : Feb 2011 – On going

Team Size : 8 Engineers and 4 Cad Staff

