



L&T Valdel Engineering, India

Key Facts

Company: L&T Valdel Engineering Ltd.

Website: www.lntvaldel.com

Industry: Petrochemical, Construction, Offshore

Country: India

Products Used:
CAESAR II®

L&T Valdel Enhances Project Quality and Productivity Offshore with CAESAR II

L&T Valdel Engineering Limited (L&T Valdel), the engineering arm of Larsen & Toubro Limited, provides comprehensive engineering solutions in the upstream oil and gas sector. With headquarters in Bangalore, India, L&T Valdel has completed complex engineering assignments that ranged from the concept and feed to basic and detail engineering, 3D model-based concurrent engineering, procurement engineering and project management, including 38 new offshore platforms and the revamp of 195 more plus 128 pipeline segments.

Oil and Natural Gas Corporation Ltd. (ONGC), India's leader in exploration and production, assigned L&T Valdel a turnkey project for the process and living quarters building project at the Mumbai High North (MHN) development offshore India. The project included detailed engineering, fabrication, installation and commissioning of MNP, an eight-legged process platform that connects via bridges to two tripod platforms, MNF1 and MNF2, for disposal of excess HP, LP and acid gas by flare and vent.

Addressing Environmental Challenges for Large Offshore Platform

The MHN project is the largest process platform and living quarters in Indian waters, and the flare bridges connecting these platforms are the longest, with the two bridges extending 135 meters to the two tripod disposal platforms that are installed separately. These bridges required precise engineering and design because the environmentally imposed loads and movements on these tripods are significantly different than those on the eight-legged process platform to which they connect. The piping running on these two bridges had to be designed for these external factors as well as the thermal deflections.

Presenting Analysis Results in Easy-to-Read Single File with CAESAR II

Using CAESAR II to analyze stresses, L&T Valdel was able produce accurate results for engineering and designing the piping exposed to rough environments.

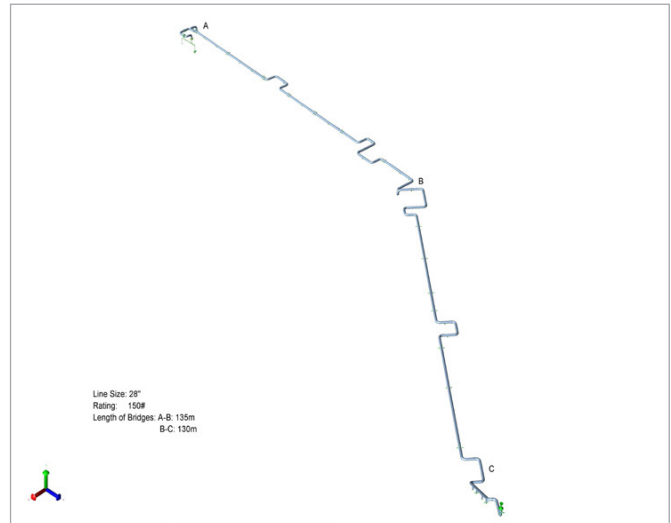
With CAESAR II, they could also include all possible combinations in a single input file which made it easy to present the results to the client. Because CAESAR II analyzes the different scenarios in a single input file, that eliminated the duplication of files.

“This saved us at least 10% of man-hours in the analysis of the system plus it improved the quality of the reports,” said Kumar Gurumallappa, assistant technologist at L&T Valdel, “and this increase in productivity also helped us adhere to the project schedule.”

With CAESAR II’s ability to import displacements, they were able to handle the more complex and bigger systems without errors, doing it in less time.

Landing Additional Projects for L&T Valdel with CAESAR II

“The work we performed with CAESAR II helped us provide total client satisfaction for ONGC, which helped open the door for additional opportunities,” Gurumallappa added. After the successful completion of this project, ONGC has since awarded L&T Valdel more engineering and design work.



About Hexagon

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Hexagon’s PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

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