



# L&T HEAVY ENGINEERING, INDIA

## **Key Facts**

Company: L&T Heavy Engineering

Website: www.larsentoubro.com

Industry: Chemical & Petrochemical,

Refineries & Fertilizers

Country: India

#### **Products Used:**

• PV Elite®

# L&T'S HEAVY ENGINEERING IC SUCCEEDS WITH PV ELITE® IN ITS MULTI-PROJECT ENVIRONMENT

Headquartered in Mumbai, India, and serving clients in 40 countries, Larsen & Toubro's Heavy Engineering IC (L&T) designs, engineers and manufactures equipment and systems for clients in the oil & gas, refinery, cracker, coal gasification, petrochemical, fertilizer and related sectors. This includes thermal and mechanical design, engineering and stress analysis, procurement, project management, logistics and specialized services. Leveraging PV Elite, L&T has successfully designed pressure vessels and heat exchangers for refineries and fertilizer and petrochemical plants plus related equipment and facilities.

#### PROVIDING VERSATILITY FOR A WIDE RANGE OF PROJECTS

L&T has found PV Elite to be versatile on a wide range of projects, including designing the largest ACN Reactor for a petrochemical project in Thailand, an ammonia converter vessel with 250 mm shell thickness for a fertilizer plant in Thal, India, and a 460 mm thick tubesheet for the synthesis loop waste heat boiler for a fertilizer plant at Sohar, Oman.

#### ADDRESSING CUSTOM CODE REQUIREMENTS

To ensure an efficiently designed project, L&T customers often specify non-code requirements. "With PV Elite, we can complete full vessel designs, even those including custom codes, eliminating the need for other supporting software or custom spreadsheets for the calculations," explained Dhanaji Jadhav, manager of the Design and Analytical cell at L&T. "PV Elite provides everything, including the design of non-pressure parts such as trunnions and base rings."

### CALCULATING ACCURATE WEIGHT AND CENTER-OF-GRAVITY

Estimating weight and center of gravity accurately are critical for transportation and handling. "We found that PV Elite calculates actual weight and center of gravity more accurately, which allows us to eliminate the time-consuming practice of manual calculations," said Jadhav.





#### **AUTOMATING BILLS OF MATERIAL**

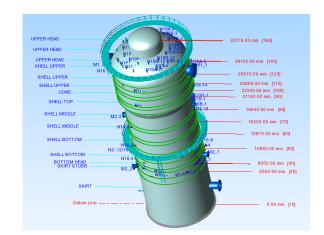
In order to complete projects on time, bills of material must be placed as early as possible. This requires preliminary design approval from the client and third-party inspecting agencies. Because PV Elite is accepted across wide industry sectors, L&T can share the same files with both customers and inspecting agencies, expediting these approvals and speeding up orders.

# SPEEDING UP DESIGN AND PROPOSALS WITH PV ELITE

PV Elite's user-friendly interface allows new engineers to learn and become productive within one week, with the department working at peak capacity. This allows L&T to evaluate 400 or more designs annually, and accurate calculations and quick iterations during design have helped them reduce the design cycle time substantially. When developing proposals for competitive bidding, timing is also critical. "Our engineers are able to carry out iterations quickly and submit the bids on time," added Jadhav. "Faster design helps us submit more bids and increase our client orders."

"We found that PV Elite calculates actual weight and center of gravity more accurately, which allows us to eliminate the time-consuming practice of manual calculations."

- Dhanaji Jadhav, Manager of Design and Analytical cell at L&T



### **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.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

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.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at hexagon.com and follow us @HexagonAB