



## CASE STUDY

# Tecnimont chooses Octave Aspect Pressure Vessel for large polypropylene project



### Key facts:

**Company:** Tecnimont Private Ltd.

**Website:**  
[www.tecnimont.it](http://www.tecnimont.it)

**Industry:** Petrochemical

**Country:** India

**Octave products used:**  
Aspect Pressure Vessel  
(PV Elite)

### Key benefits:

- Performed all analysis with a single solution
- Produced design deliverables for 150 pieces of equipment
- Eliminated errors and saved significant labor hours

### EPC designs Azerbaijan plant for SOCAR Polymer

Tecnimont Private Ltd. (Tecnimont), a wholly-owned subsidiary of the Maire Tecnimont Group, provides engineering, procurement and construction (EPC) services to a variety of industries, including oil & gas, petrochemicals, fertilizers and power generation. Tecnimont has more than 50 years of experience in executing large and complex projects worldwide on a lump-sum turnkey basis. Headquartered in Mumbai, India, the firm maintains supporting offices in New Delhi, India; Abu Dhabi, UAE; and Jeddah, Saudi Arabia.

### Identifying goals

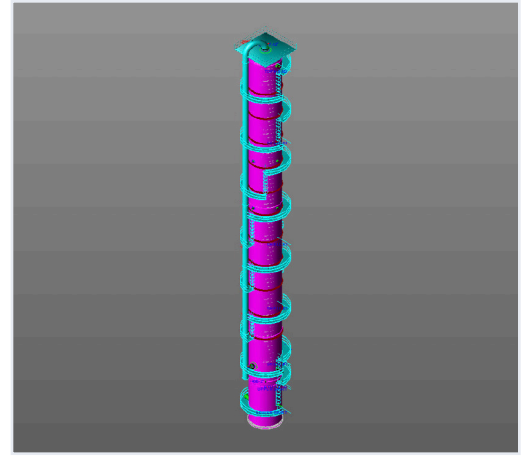
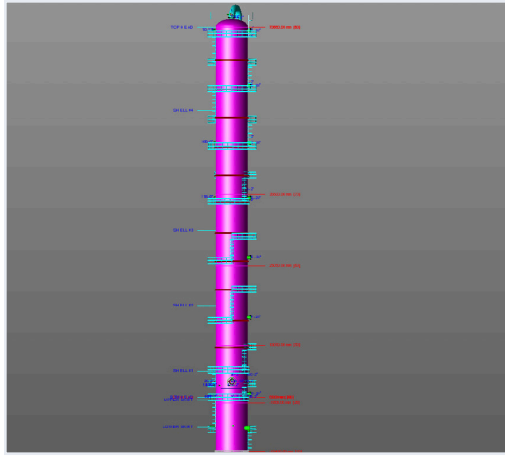
SOCAR Polymer, the first public-private partnership in Azerbaijan's oil & gas sector, selected Tecnimont to provide EPC services for its facility in the Sumgayit Petrochemical Complex, Baku, Azerbaijan. The facility's two plants can produce 180,000 tons per year of polypropylene (PP) and 120 tons per year of high-density polyethylene (HDPE).

The contract, valued at \$386 million, called for Tecnimont to provide complete engineering and construction through startup and testing of the polyethylene plant, including related utilities and off-site facilities. The project involved 150 pieces of equipment.

### Overcoming challenges

Initially, the client wanted to shift its existing plant from Russia to Azerbaijan and use the existing equipment. After investigating the project requirements, Tecnimont found that most of the equipment would not be suitable for the revised plant capacity conditions and, after consultation, the client decided to install new equipment at the Azerbaijan facility.

Performing the analysis manually would require much more time and would typically result in errors and costly rework. On a project this size, the additional costs would have been extremely burdensome.



"Most software products lack capabilities for modeling internal components such as trays and demisters," said Arpita Shah, principal engineer at Technimont.

Because Technimont chose Aspect Pressure Vessel for the project, it was able to perform all the required calculations and produce all design deliverables with a single solution.

## Realizing results

Tecnimont chose Aspect Pressure Vessel for the column design and used it to model everything, including the internal and external parts.

Best of all, Aspect Pressure Vessel's built-in tools for analysis and design and automation capabilities helped the team to eliminate errors and save significant labor hours.

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*"With Aspect Pressure Vessel our engineers could analyze everything in a single software, which made things easier for everyone."*

**Arpita Shah**  
Principal engineer, Technimont

## About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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