



Siemens, India

Key Facts

Company: Siemens

Website: www.siemens.com

Industry: Petrochemical, Gas

Country: India

Products Used:

CAESAR II®

Siemens Saves 500 Hours with CAESAR II® for Aluminum Installation in India

Siemens Group is a global developer and implementer of technology-enabled solutions that support the world's quest for developing modern infrastructure for energy, healthcare and industry. The Siemens Group in India includes 17 companies that employ over 18,000 people and operate 21 manufacturing plants and a wide network of sales and service offices with over 500 channel partners. The Siemens Oil & Gas unit at Vadodara in Gujarat, India, provides medium- and small-scale power plants with turbine, compressors and induced fan solutions. The unit has provided more than 500 turbines for global installations.

Engineering New Steam Turbine Generator for Hindalco Aluminum Installation

Hindustan Aluminium Company Ltd. (Hindalco), the world's largest aluminum rolling company and the aluminum giant in India, awarded Siemens the Hindalco 1 x 100 MW steam turbine generator Unit #5 project which included engineering, supply and installation of the turbine and auxiliary facilities within the turbine generator boundary, with the only exceptions being boiler, civil and structural engineering.

Pipe sizes ranged from 15 to 650 nominal bore (NB) diameters with material ranging from A106Gr.B carbon steel to SA335 P22 alloy steel pipe. Deliverables such as documents and reports included stress isometric drawings, code compliance and stress summaries, load case reports with the restrain summary, a hanger datasheet and bills of material including plot snaps and deflection shape snaps.

Eliminating Conflicts between Clients and Vendors to Expedite Project

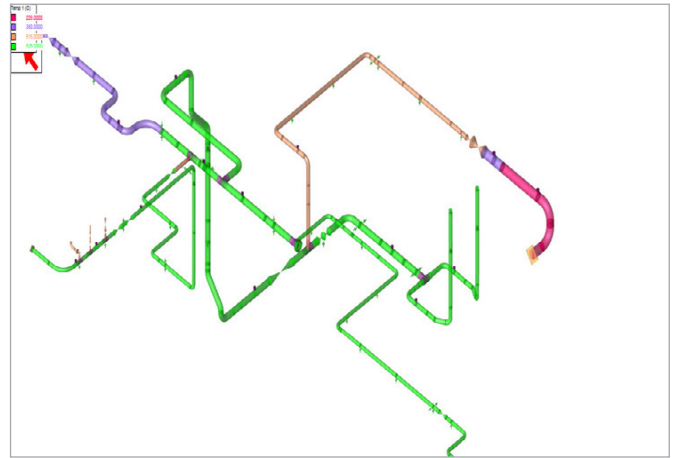
Because Siemens had successfully completed four similar scope units using CAESAR II®, Hindalco had high expectations for the completion and execution of this project. Demonstrated advantages included the effective data transfer and formatting in CAESAR II which made it easy for communication and knowledge transfer among all parties involved, which helped eliminate conflicts and disputes.

Despite a tight schedule of 18 months, Siemens was able to match up various milestones, such as final piping layout and piping loads for civil and structural design while also addressing changes prior to finalizing the stress analyses and bills of material, all made possible by CAESAR II. The user-defined spring datasheet capability in CAESAR II helped minimize rework from site modifications, further expediting the project's schedule for the customer.

Saving 500 Man-hours and Related Expenses with CAESAR II's Accuracy

Siemens was able to save nearly 500 man-hours by leveraging CAESAR II features, such as user-defined supports, stress isometrics and export restrain summaries plus sharing earlier unit models. This helped save approximately 0.75 million Indian rupees. The project was a major success, and it is now included in Siemens' project portfolio.

"Reliable results, exclusive features of support selection and the capability of modeling all site conditions with CAESAR II were critical to this project's success," explained K.G. Brahmhatt, head of Siemens' project engineering analysis for the facility. "These proven advantages make CAESAR II a widely popular and preferred solution within the power industry."



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.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 21,000 employees in 50 countries and net sales of approximately 3.9bn EUR. Learn more at [hexagon.com](https://www.hexagon.com) and follow us @HexagonAB.