



Chematur Engineering, Sweden

Key Facts

Company: Chematur Engineering AB

Website: www.chematur.se

Description: Chematur Engineering has extensive experience in the fields of Nitro Aromatics and Isocyanates, Bioethanol and Ethanol derivatives, Hydrogen Peroxide as well as Explosives and Propellants. Chematur Engineering will carry out any required scope of project work, from licensing of its proprietary technologies to turnkey undertakings.

Industry: Chemical, Construction

Country: Sweden

Products Used:

- Intergraph Smart® 3D
- SmartPlant® Foundation

Chematur Engineering Sees Data Reliability with Hexagon Solutions

Chematur reduces total installed costs by at least 10 percent with Hexagon Solutions, and the company expects that having faster, more reliable access to project data and the ability to perform concurrent engineering and re-use data will reduce engineering labor hours by 20 percent.

The Challenge

Chematur Engineering AB has a long and successful history of handling the complete design, delivery, construction and commissioning of specialty chemical production plants. Since 1930, more than 1,200 plants have been supplied to customers worldwide.

As an organization that insists on exceeding set expectations, Chematur Engineering is always looking for ways to streamline its engineering workflow to maximize efficiency and make the best use of its high-value engineering facilities, all the while maintaining full project control.

Always an innovator, Chematur's fermentation process is an industry-standard setter, and the company is now involved with its customers in the development of bioethanol as an alternative source of fuel. Chematur's business in Asia – particularly China – is increasing rapidly. For a company that is used to deploying and controlling key technologies that add value for the industries it serves, the world's fastest growing market offers unique opportunities.

"We do feel that plant lifecycle standards are there to be set," said Hakan Andersson, engineering manager at Chematur. "China wishes to embrace the best, but it is also a highly competitive market. We will succeed by working smarter – using plant information technology to deliver projects more quickly, at lower cost."

Objective

The company is implementing the latest generation of Hexagon plant design and information management technology, beginning with Intergraph Smart® 3D and SmartPlant® Foundation. Smart 3D is currently in use on six Chematur projects worldwide, with full worksharing between engineers in Sweden, Poland and India. Intergraph Smart P&ID is also in place, with Intergraph Smart Instrumentation also slated.

Chematur says that the benefits include reduced time for project completion, with no reduction in quality or safety. The level of input data is reduced by storing all design and project information in a single project database – any project and plant data and documents can then be generated from the same database.

“The technology provides us with valuable functionality,” says Hakan Andersson, an engineering manager at Chematur. “It is database-centric and rule-based, both of which have a big impact on engineering, flexibility and productivity, and it enables full worksharing. It also allows us to continue to make use of our investment in our legacy data.”

Andersson said better design quality is another benefit, with less engineering rework and on-site changes needed, and the ability to produce better plant design drawings faster. Construction and installation data can be generated more quickly, too.

In all of its chosen markets, Chematur expects that having faster, more reliable access to project data and the ability to perform concurrent engineering and re-use data will reduce engineering labor hours by 20 percent. Having more accurate and consistent data should cut on-site rework by 10 to 15 percent, according to Chematur calculations.

And the bottom line?

“We expect to reduce the total installed cost of the plant by 10 percent plus,” Andersson said.



An earlier construction kickoff means we can start the plant up earlier for the customer.”

Hakan Andersson

Engineering Manager, Chematur Engineering

About Hexagon

Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, 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 3.8bn EUR. Learn more at [hexagon.com](https://www.hexagon.com) and follow us @HexagonAB.