



LITWIN, RUEIL MALMAISON, FRANCE

Key Facts

Company: Litwin

Website: www.litwin.fr/public/

Employees: 1,200 worldwide

Industry: Process, Power & Marine

Country: France

Products Used:

- Intergraph Smart® 3D
- Intergraph Smart Instrumentation
- Intergraph Smart P&ID
- PDS®

Key Benefits:

- Faster, higher-quality piping drawing production
- Better, more easily implemented project coordination
- Fully-integrated engineering capabilities
- Easier compliance with regional laws and regulations

LITWIN SELECTS INTERGRAPH SMART® 3D TO IMPROVE PRODUCTIVITY

Streamlining Modeling Workflows

Litwin is a French engineering company focusing on engineering, procurement and construction (EPC) mid-sized turnkey contracts in the oil and gas, chemical, energy and environmental sectors. The company provides comprehensive engineering services, from feasibility studies through construction of plants, for clients in Europe, North Africa and the Middle East. Litwin is a subsidiary of the Bateman Litwin N.V Group, a supplier of technology, engineering, procurement and project management services to the world's energy and resource industries.

IDENTIFYING GOALS

With a growing demand of large CAPEX projects, Litwin faces the challenge of completing turnkey jobs in a limited amount of time on a pre-defined budget. Litwin set out to improve productivity and realize significant improvements in workflows and discipline integration using a new generation of engineering software. The company also needed capabilities to ensure environmental compliance requirements, as well as to support its vision for the future.

OVERCOMING CHALLENGES

- Easily exchange the data generated during the design and reuse it to increase data consistency throughout the different stages (design, procurement, construction)
- Base an environment on a Microsoft® interface, interactive and user-friendly
- Obtain an easy-to-use 3D design tool

REALIZING RESULTS

Litwin completed the first phase of its overall program using PDS software, and then the company selected Smart 3D software for phase two. Smart 3D, Hexagon's next-generation 3D design system, provides clients with the most productive, highest quality multidiscipline 3D modeling environment in the world for global office execution of process and power projects.



Customers using Smart 3D typically realize 25% to 35% initial increases in productivity compared to other systems, higher quality deliverables, and shorter schedules.

Smart 3D is the integral design component within Hexagon's data-centric solutions that provides all of the capabilities needed for large-scale project engineering design. With Smart 3D, Litwin can keep designs as-built throughout the plant lifecycle.

Litwin chose to implement Smart 3D on a live project without going through a pilot project. For the implementation of the live project, the design team used Smart 3D in a concurrent engineering mode for the 3D modeling of the civil work, structural steel, equipment, piping and cable trays. "The possibility of integrating 3D external models and placing drawings in reference is clearly an asset of the product," said Patrick Mimouni, CAD manager and Smart 3D administrator at Litwin.

Litwin produced all area and piping drawings, isometrics, and pipe support drawings with Smart 3D. The company issued civil and underground network drawings with MicroStation V8 based on views from the 3D model placed in reference.

A few years earlier, Litwin had implemented Smart P&ID, a knowledge-driven engineering software for creating intelligent piping and instrumentation diagrams (P&IDs). Litwin is already planning the test phase of the link between Smart P&ID and Smart 3D after the completion of the project as a step forward to an integrated engineering environment.

One of the keys to the project's success is that users and administrators have shown high motivation and involvement in regards to Smart 3D. Furthermore, the user interface is interactive and easy to use, with a common philosophy for all tasks. The SmartStep commands are very helpful for the designers because of the intuitive toolboxes.

"The first measurable benefit was the efficiency in piping drawing production," said Jean-Luc Hoffert, Litwin layout and piping design department manager. "We have already

saved 30% of our time in drawing production compared to the first project."

The deliverables (isometrics and other drawings) satisfy Litwin's requirements and expectations, with the possibility of generating them very early in the process to improve the coordination of the project.

Standard administrator and user training sessions have been organized at Hexagon offices as a result of Litwin decision to launch the design with Smart 3D. Litwin ordered services from Hexagon for the server installation and the creation, setup, and customization of the project. Up to this point, there have been 13 assistance days (90% of project completion in design), including server installation, project creation and customization, complementary training for piping specifications, and complementary customization of isometrics, Isogen® and drawings.

As far as the modeling and administration of the project is concerned, the Litwin team could achieve immediate autonomy after the training. The creation of the specifications and the installation of the catalogues, as well as the customization, were carried out at the same time as modeling. Less than six weeks after the project started, Litwin designers started work on the live project with Smart 3D.

MOVING FORWARD

Smart 3D is now fully-integrated with Litwin engineering capabilities. Litwin will continue to develop the Smart 3D module. Litwin will concentrate its efforts on all interfaces with the Smart suite, including P&ID and instrumentation solutions it uses to maximize efficiency and fulfill its requirements.

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.