



FACTS AT A GLANCE

Company: Litwin

Web site: www.litwin.fr/public/

Description: 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.

Employees: 1,200 worldwide

Industry: Process, Power & Marine

Country: France

PRODUCTS USED

- SmartPlant 3D
- SmartPlant Instrumentation
- SmartPlant 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 SMARTPLANT® 3D TO IMPROVE PRODUCTIVITY

Streamlining Modeling Workflows

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 re-use 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 Intergraph® PDS® software, and then the company selected Intergraph SmartPlant® 3D software for phase two. SmartPlant 3D, Intergraph'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 SmartPlant 3D typically realize 25- to 35-percent initial increases in productivity compared to other systems, higher quality deliverables, and shorter schedules.

SmartPlant 3D is the integral design component within SmartPlant Enterprise data-centric solutions that provides all of the capabilities needed for large-scale project engineering design. With SmartPlant 3D, Litwin can keep designs as-built throughout the plant life cycle.

Litwin chose to implement SmartPlant 3D on a live project without going through a pilot project. For the implementation of the live project, the design team used SmartPlant 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," says Patrick Mimouni, CAD manager and SmartPlant 3D administrator at Litwin.

Litwin produced all area and piping drawings, isometrics, and pipe support drawings with SmartPlant 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 SmartPlant 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 SmartPlant P&ID and SmartPlant 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 SmartPlant 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 reduction," says Jean-Luc Hoffert, Litwin layout and piping design department manager. "We have already saved 30 percent 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 early in the process to improve the coordination of the project.

Standard administrator and user training sessions have been organized at Intergraph offices as a result of Litwin decision to launch the design with SmartPlant 3D. Litwin ordered services from Intergraph for the server installation and the creation, setup, and customization of the project. Up to this point, there have been 13 assistance days (90 percent 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 SmartPlant 3D.

MOVING FORWARD

SmartPlant 3D is now fully integrated with Litwin engineering capabilities. Litwin will continue to develop the SmartPlant 3D module and looks forward to upgrading to the 2009 version, which will include additional improvements, including queries. Litwin will concentrate its efforts on all interfaces with the SmartPlant Enterprise suite, P&ID, and instrumentation solutions it uses to maximize efficiency and fulfill its requirements.

“Considering our first project with SmartPlant 3D, including the training and essential feedback for the software’s continuous improvement, we estimate the gain of productivity to be more than 25 percent for future projects.”

Jean-Luc Hoffert
Layout and Piping Design Department Manager
Litwin

ABOUT INTERGRAPH

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph's industry-specific software to organize vast amounts of data into understandable visual representations and actionable intelligence. Intergraph's software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph PP&M provides

enterprise engineering software for the design, construction, and operation of plants, ships, and offshore facilities. Intergraph SG&I provides geospatially powered solutions to the defense and intelligence, public safety and security, government, transportation, photogrammetry, utilities, and communications industries.

For more information, visit www.intergraph.com.

