



JSC GAZPROM NEFT OMSK, RUSSIA

Key Facts

Company: JSC Gazprom Neft Omsk Refinery

Website: www.onpz.gazprom-neft.ru

Description: JSC Gazprom Neft Omsk Refinery is a subsidiary of Gazprom Neft, one of the most up-to-date oil refineries in Russia and one of the largest in the world. Its total capacity is 21.4 million tons per annum, producing about 50 varieties of petrochemicals. In 2012, the World Refinery Association acknowledged Omsk Refinery as the No. 1 refinery in Russia and the Commonwealth of Independent States countries.

Industry: Oil refinery

Country: Russia

Products Used:

- Intergraph Smart® 3D
- Intergraph Smart P&ID
- Intergraph Smart Review

GAZPROM NEFT OMSK REFINERY CREATES AND IMPLEMENTS A 3D MODEL AND DOCUMENT VISUALIZATION SYSTEM

IDENTIFYING GOALS

Bureau ESG, an information technologies systems integration company, set a goal to create and implement a 3D model and document visualization system based on Intergraph Smart® Review and CAXperts Review Manager applications.

The main goal of the project was to create a 3D model visualization prototype which would lead to:

- Access to 3D models and documents, including remote corporate access
- The conversion of data from different formats
- Projection of 3D models to surface
- Definition of collisions
- Design annotation and transfer to designers
- Visualization of construction stages
- Photorealistic rendering and creation of presentation materials

GETTING RESULTS

In less than six months it was possible to:

- Create a working group to work with the system
- Train 20 refinery employees to work with Hexagon PPM products
- Set up Smart Review and CAXPerts Review Manager applications within the first stage of system implementation
- Set up the process of data migration from the design institute to the plant and back



MOVING FORWARD

Sergey Kaplenko, head of the Design Documentation Support Department, Omsk Refinery, said: "Just imagine the situation, when two separate contractors work on two different plant construction projects, but which are linked technically. When the design is not completed yet, but the construction is already taking place, we might discover that the pipeline of one object interferes with components built up at another object. If we were to start the remodeling process at that stage, it would lead to significant financial loss and we would not complete the project on time. This new system, which applies 3D models, allows us to identify and minimize errors while the design is being performed, but not yet the construction. It is possible to open several designs simultaneously and see how well they work together."



ABOUT HEXAGON

Hexagon is a global leader in digital solutions that create Autonomous Connected Ecosystems (ACE). Our industry-specific solutions create smart digital realities that improve productivity and quality across 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 20,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at hexagon.com and follow us @HexagonAB.