

Novosibirsk Chemical Concentrates Plant

Customer Success Story

Autodesk® Inventor®
AutoCAD® Electrical

Autodesk Inventor software not only helps our organization design to conform with standards administered by the Commonwealth of Independent States, but it provides us tools for the full fabrication cycle—from blueprint to finished product.

—Yuri Ibrayev
Deputy Chief of CAD
Department
Novosibirsk Chemical
Concentrates Plant

Fueling energy.

Autodesk® software helps increase production capacity at nuclear fuel plant by three fold.



Image courtesy of NCCP

Novosibirsk Chemical Concentrates Plant (NCCP) is a division of Russia's TVEL company and one of the State Atomic Energy Corporation's largest manufacturers of nuclear fuel for power and research reactors. It is the country's only manufacturer of lithium and its compounds, producing fuel assemblies for about 6 percent of the nuclear power reactors worldwide.

The NCCP facility is equipped with advanced, high-productivity technology that supports ever-changing consumer fuel demands as well as safety and reliability requirements. Since the early 1990s, it has been using AutoCAD® Electrical software, and it recently adopted Autodesk® Inventor® software to lay the foundation for a more productive workflow. The Autodesk approach fulfills the following functions:

- Reduces costs of higher-quality products
- Unifies, standardizes, and streamlines processes
- Helps create accurate technical documentation
- Maintains regulatory and compliance data

The Challenge

NCCP needed a single cohesive solution to centralize and optimize the work of the engineering and technology departments. In addition, it needed to generate accurate documentation of 3D models to help designers visually communicate their design intent.

The Solution

NCCP is constantly upgrading its engineering environment to meet growing business demands, and recently designed and implemented a new production line for uranium dioxide powder. "Our new line, designed

using Autodesk software, has a production capacity three times that of our existing lines," says Yuri Ibrayev, deputy chief of the CAD department.

Ibrayev continues that Inventor software provided NCCP with 3D models for programmed numerical control and coordinates. Digital Prototyping dramatically improved the quality of engineering solutions by detecting errors at the design phase, enabling engineers to quickly resolve them to help reduce environmental impact and minimize hazardous waste. It has also contributed to overall team coordination.

The success of the process also hinged on employees completing a comprehensive exam before using their new skills in the workplace. SiSoft, an Autodesk Authorized Reseller, organized training seminars for about 320 managers and engineers.

The Result

The application of 3D modeling enabled NCCP to significantly reduce development costs, as well as increase the yield of high-quality materials. Making common software available to all departments also reduced completion time for design and technical documentation. "Autodesk Inventor software not only helps our organization design to conform with standards administered by the Commonwealth of Independent States, but it provides us tools for the full fabrication cycle—from blueprint to finished product," concludes Ibrayev.

For More Information

For more information about Autodesk Inventor software, visit www.autodesk.com/inventor.

Autodesk, AutoCAD, Autodesk Inventor, and Inventor are registered trademarks or trademarks of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders. Autodesk reserves the right to alter product and services offerings, and specifications and pricing at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document. © 2010 Autodesk, Inc. All rights reserved.

Autodesk®