## **SIEMENS**

### **Industrial machinery**

# Hantech

PLM solutions help Korean manufacturer increase orders, expand globally

#### **Products**

Solid Edge, Teamcenter

#### **Business challenges**

Production defects worked against company's goal of becoming a high value-added, global player

#### **Keys to success**

Upgrade from 2D AutoCAD to 3D design using Solid Edge Management of existing and new data using Teamcenter Comprehensive design data library Digital interference checking

#### Results

20 percent reduction in design errors and related costs 40 percent increase in production management productivity 60 percent more data re-use Leading chemical machinery manufacturer realizes a 40 percent increase in production management productivity since upgrading to Solid Edge and Teamcenter

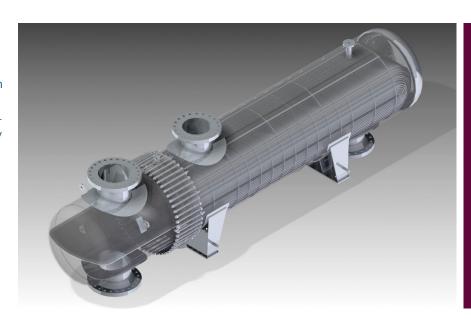
#### **Expanding globally**

Hantech was founded in 1973 as a machinery division of Korea Fertilizer, and later spun off from Samsung Fine Chemicals in 1998. It currently focuses on machinery and equipment used in chemical production, such as heat exchangers, thermal reactors and ultra-low temperature facilities for the storage of

low-temperature gases and nonferrous metals such as titanium and zirconium.

Hantech's customers include Samsung, Posco E&C, and Korea Industrial Gases. Among recent honors, Inno-Biz presented Hantech with an Export Tower Award of US\$50 million and Posco selected the company as one of its best suppliers.

Much of Hantech's production is outsourced, and in the past the company found defects in its products that were caused by data errors. With a vision of becoming a high value-added, global player, Hantech made eliminating the defects a top priority. Another issue the company needed to deal with was its 2D



#### **Results** continued

More than twice as many bids and accepted orders compared to competition

Systematic management of data and stronger security

Fewer problems and costs during on site installations

"The adoption of Teamcenter has raised efficiency in our PLM process by more than 40 percent, ultimately more than doubling the utilization rate for bidding and order acceptance."

Seong-Geun Park
Design Team
Chemical Machinery
Hantech

design system, which was far from ideal at identifying interferences, and incapable of improving productivity. These issues made it clear that Hantech needed to upgrade to a 3D design process. The company also wanted a way to increase the re-use of existing designs and improve data security.

#### One source for two solutions

Hantech evaluated a number of product lifecycle management (PLM) solutions and decided to adopt Solid Edge® software from Siemens PLM Software as its new, 3D computer-aided design (CAD) system. Solid Edge met many of Hantech's requirements, including high quality, ease of use, built-in interference checking, and compatibility with the company's existing AutoCAD® software data. To better manage product data, Hantech selected another Siemens PLM Software product, Teamcenter® software.

Hantech quickly adopted 3D modeling. Product designers leveraged the new CAD software's ease of use, and never needed detailed instructions to create design geometry. The ease of working with Solid Edge saves them time, and allows the company to easily deliver complicated parts.

The Solid Edge models go through a 3D simulation that includes the overall layout

of the plant where the equipment will be installed, showcasing the entire product concept as well as potential errors and defects. With Solid Edge, the design team has also completed the time-consuming drawing review process in one-third of the time previously required.

The Solid Edge data is effectively and safely managed using Teamcenter, which stores the data in a single repository that more engineers can access, boosting data re-use, while reducing the effort required for error inspections and rework. The library management system inside Teamcenter allows real-time data and project tracking and verification, significantly reducing errors in design.

# Greater design accuracy; more design re-use

Hantech experienced significant benefits from the use of Solid Edge and Teamcenter. The company has seen a 20-percent decrease in both design errors and related costs thanks to the numerous advantages of using Solid Edge. These include the simplicity of creating the design, prechecks for interferences, bill of materials (BOM) calculation, weight calculation, and compatibility with existing AutoCAD data for migrating older 2D projects into 3D.

"Solid Edge has enabled design re-use and integrated CAD data management, which has resulted in fewer design errors and a dramatically faster design process."

Seong-Geun Park Design Team Chemical Machinery Hantech

#### Solutions/Services

Solid Edge www.siemens.com/solidedge Teamcenter www.siemens.com/teamcenter

#### **Customer's primary business**

Hantech develops machinery and storage tanks used in chemical production. www.hantechltd.com

#### **Customer location**

Ulsan South Korea

#### **Partner**

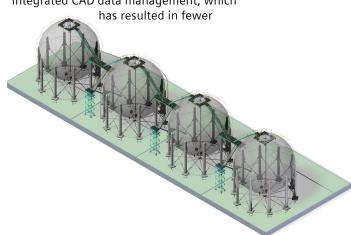
YounChang™ CAD

"Solid Edge has enabled design re-use and CAD data management, which has resulted in fewer design errors and a dramatically faster design process, improving our ability to compete."

Seong-Geun Park Design Team Chemical Machinery Hantech Using Teamcenter has generated operational synergy. All product data is managed in a single system. By making the data more readily available and easily accessible, the use of Teamcenter has helped prevent purchases of duplicate components, raised the data re-use rate by 60 percent, and enabled the company to quickly and accurately respond to potential problems.

"Solid Edge has enabled design re-use and integrated CAD data management, which

design errors and a dramatically faster design process, improving our ability to compete," says Seong-Geun Park, who is on the Chemical Machinery design team at Hantech. "The adoption of Teamcenter has raised efficiency in our PLM process by more than 40 percent, ultimately more than doubling the utilization rate for bidding and order acceptance."



# "The adoption of Teamcenter has raised efficiency in our PLM process by more than 40 percent..."

Seong-Geun Park Design Team Chemical Machinery Hantech

#### **Siemens Industry Software**

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