# **SIEMENS**

# Automotive and transportation

# Chery Automobile

Right products, right market, right time

#### **Products**

NX, Teamcenter

#### **Business challenges**

Accelerate product development and manufacturing Implement "build to order" Increase vehicle production

#### Keys to success

Comprehensive PLM approach Knowledge re-use Product configuration management Digitally managed workflows PDM-ERP integration

#### **Results**

Engineering changes in 3 to 5 days vs.10 to 20 Data re-use increased from 5 percent to 20 to 30 percent 90 percent reduction in time to find and retrieve data



Teamcenter supports China's fourth-largest automotive OEM in its efforts to capture a greater share of the country's exploding automobile market

# Seizing a growth opportunity

Chery Automobile Co., Ltd. is China's fourth-largest automaker. The company employs approximately 20,000 people and produces twelve vehicle platforms, ranging from passenger cars to SUVs to busses. Chery's position in the Chinese auto market has been marked by impressive growth. In 2004, the company sold 86,000 units and was the ninth-largest automaker. In just two years, sales had grown to 305,000 units, which brought the company to its current ranking of fourth place.

In its mission to capture an ever-greater share of the rapidly growing Chinese automobile market, Chery faces several critical business challenges. First, the company must accelerate both new product development and the manufacturing process so that it can bring new models to market more quickly. Second, it plans to move from a "build to stock" approach to "build to order," which will permit more vehicle customization and increase customer satisfaction. Third, Chery wants to develop additional vehicle platforms to better meet market demands.

## PLM as platform for the enterprise

Since 2003, Chery has been using product lifecycle management (PLM) technology from Siemens PLM Software to address these challenges. According to Liu Ying of

Results (continued)
Earlier problem detection reduces engineering changes
Improved product quality; slashed costs
Faster time-to-market



the company's Information Technology Division, "Siemens PLM Software technology was chosen because of the company's strong background in the automotive industry as well as for the breadth of its Teamcenter digital lifecycle management solution." Teamcenter® software provides the fundamental technology Chery needs at this point in its evolution: a product management platform for collaboration and knowledge re-use; support for collaborative design teams; product configuration management and accurate data flow (which supports "build to order"); engineering change management, project management and PDM-ERP integration.

The Teamcenter implementation team consisted of personnel from both Chery and Siemens PLM Software. Full implementation was preceded by a three-month pilot project in which CAD (Siemens' NX™ software), document management, product structure and configuration management and workflow management were implemented in the R&D department.

#### Market share is the measure of success

The ultimate measure of the success of Chery's PLM solution is increased market share and customer satisfaction, both of which have been occurring since the PLM implementation began. In addition, the

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Liu Ying PLM Project Manager Chery Automobile

#### Solutions/Services

NX www.siemens.com/nx Teamcenter www.siemens.com/teamcenter

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

Chery Automobile Co., Ltd. is China's fourth-largest automaker.

#### **Customer location**

WuHu, Anhui Province China

### **Special recognition**

Winner of AP PLM Innovation Award 2007

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Liu Ying PLM Project Manager Chery Automobile Unexpected benefits of PLM include a refinement of the product development process, greater modularity in designs permitting increased part re-use, and acceptance and leveraging of PLM by other departments within the enterprise.

company notes a number of other internal improvements attributed to the PLM system. In terms of design collaboration, there is more information sharing now that information is managed by Teamcenter, and documents are 95 percent consistent versus 65 percent previously. Data re-use has increased rom five percent to between 20 and 30 percent.

Earlier problem detection has reduced the number of engineering changes. Changes that are still required are completed in only three to five days instead of the 10 to 20 days needed previously. It was difficult to even track changes in the past but this is now done in only five minutes. Other PLM-related benefits include a 90 percent reduction in time to find and retrieve data,

and streamlined data flow from design to manufacturing due to PDM integration with manufacturing and ERP systems.

While many of these benefits were expected, there have been some unexpected benefits from PLM as well. These include a refinement of the product development process, greater modularity in designs permitting increased part re-use, and acceptance and leveraging of PLM by other departments within the enterprise.

Overall Siemens PLM Software technology improves Chery's ability to effectively innovate, which enhances the company's image in the worldwide automotive industry.

## Siemens PLM Software

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