

INDUSTRIAL EQUIPMENT CASE STUDY **ASIA AGRICULTURAL MACHINERY**



Challenge:

To better respond to growing demand from overseas markets, Asia Agricultural Machinery needed to grow its product portfolio, improve product quality, shorten development time, and enhance collaboration with industry partners.

Solution:

The company chose Dassault Systèmes' **3DEXPERIENCE®** platform, adopting 3D as its universal language for design and collaboration, to help it deliver agricultural equipment that is more customized, connected and sustainable than ever.

Benefits:

The company slashed product development time by more than half, increased design accuracy and quality through better collaboration, and strengthened data security by centralizing all data in an integrated system.

Leading manufacturer of agricultural machinery in Korea

Established in 1945 as the first agricultural machinery manufacturer Korea, Asia Agricultural Machinery has been a pioneer in the modernization of agriculture in the country. It has led the local agricultural equipment industry by continuously launching economical and practical products suited to the country's agricultural environment. In parallel, Asia Agricultural Machinery has been transforming itself into a global player by expanding beyond the Korean market and exporting to over 40 countries in Europe, Asia, the Middle East and Central and South America.

The company has made technological expertise and know-how a cornerstone of its strategy. Starting with obtaining the KS mark (Korean Industrial Standards) for its entire power sprayer line-up during the company's early days, it has built industry-leading technological prowess by building alliances with other agricultural machinery companies such as Germany's CLAAS, the UK's MF Tractors and Japan's Star. Leveraging this technical expertise accumulated over a long period of time, Asia Agricultural Machinery is today focused on growing as a global green company.

3DEXPERIENCE platform supports growth strategy

The company implemented Dassault Systèmes' (3DS) 3DEXPERIENCE platform and adopted 3D as its universal

language for all its development activities. Working on a unique platform brought instantaneous benefits starting with enhanced data security. "In the past, engineers created drawings with our existing 2D system and saved them in their PCs. Moreover, not only did engineers manage their data individually, but they only did it from time to time," said Hee-gyu Ahn, assistant director at Asia Agricultural Machinery. "This made it hard to find specific information or a drawing, and there was a risk that data would be lost. However, since a drawing or document is now created with CATIA V6 and stored in a unique and integrated platform instead of locally, the problem was automatically solved. Anyone in the company can instantly view the latest data and security risks have disappeared."



"With the **3DEXPERIENCE** platform, our product time to market has been reduced from two to three years to one year."

— Hee-gyu Ahn
Assistant Director, Asia Agricultural Machinery

Managing data in an integrated environment also reduced the time spent on designs as well as design errors; this drastically accelerated the product development cycle. "With the **3DEXPERIENCE** platform, our product time to market has been reduced from two to three years to one year, which is less than half," Ahn said. "These improvements also became possible after integrating scattered paper drawings and 2D drawings into a single digital management system."

"By implementing CATIA V6, we not only shortened product development time, we were able to benefit from its ability to instantly transform any idea into a 3D design and to generate molds that can be mass produced in no time," Ahn continued. "Our engineers can test their various ideas, which was impossible with a more costly and time-consuming 2D approach. Overall, we have improved product quality and reduced product development time."

Asia Technology Machinery also uses 3DVIA Composer to rapidly transform its CATIA designs into high quality product documentation and technical illustrations. “We recently used 3DVIA Composer to produce our new product brochure,” said Ahn.

Better data management and multi-site collaboration

The **3DEXPERIENCE** Platform, including its ENOVIA application for collaborative innovation, enables Asia Agricultural Technology to manage all its product data in a single instance and to benefit from powerful collaborative capabilities.

Generating bills of materials was previously done manually, but is now an automatic process with ENOVIA. The company saw the consistency of its E-BOMs improve and noticed a drastic reduction in data omissions or errors when transferring data to M-BOMs. “We expect this will provide anyone in the company with the ability to access accurate data and through collaboration to drive innovation even further,” Ahn said. “We also plan to expand the use of ENOVIA V6 throughout the company by establishing an enterprise-wide integrated system that integrates and manages all company data,” Ahn said.

Collaborating with partners through 3DEXPERIENCE

Asia Agricultural Machinery plans to extend collaboration with other global agricultural machinery companies and to grow as a global green company. It has a close technological partnership with Germany’s CLAAS, a leading agricultural machinery company, which also uses the **3DEXPERIENCE** Platform. With this in common, both companies boosted collaboration to an unprecedented scale.

“Our goal is to become the world’s foremost agricultural machinery company,” Ahn said. “Adopting the **3DEXPERIENCE** Platform, which is used by some of the world’s leading agricultural machinery companies, was the obvious choice for Asia Agricultural Machinery. We have plans to expand our use of the 3DS applications, by adding SIMULIA for virtual product simulation and DELMIA for digital manufacturing to our installation in the future,” he concluded.



Above: Agricultural machine visualized with 3DVIA Composer

Below: Multi-purpose cultivators

Focus on Asia Agricultural Machinery

Korea's leading agricultural machinery manufacturer

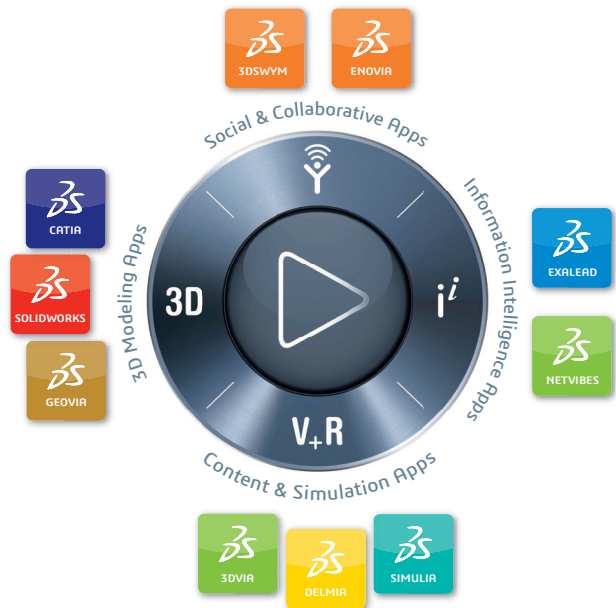
Products: Agricultural Machinery (cultivators, speed sprayers, binding machines, tractors, combines, rice transplanters)

Headquarters: Daegu Metropolitan City, Korea

For more information
www.asiakor.com

Our 3DEXPERIENCE® Platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the 3DEXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 170,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.3ds.com.



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