

## **KARIS**

ACCELERATING DEVELOPMENT OF MEDICAL STERILIZERS, DISINFECTORS, AND SANITIZERS WITH **3DEXPERIENCE** WORKS SOLUTIONS

### **Case Study**



By adding **3DEXPERIENCE** Works collaboration, data management, and communication solutions to its **SOLIDWORKS** implementation, Karis has shortened design cycles for its products, such as the Steam Sterilizer shown here; reduced development costs, and accelerated time to market, despite growing demand for product customization.

### Challenge:

Respond to customer demand for increased product customization while simultaneously boosting productivity, accelerating time to market, and safeguarding product data from the threat of cyberattacks.

### Solution:

Add 3DEXPERIENCE Works collaboration, data management, and communication solutions to its SOLIDWORKS Premium, SOLIDWORKS Flow Simulation, and DraftSight Enterprise software installation—including Collaborative Designer for SOLIDWORKS, Collaborative Industry Innovator, Product Release, and 3DSwymer roles—to take advantage of the benefits of the cloud-based 3DEXPERIENCE platform..

### Results:

- Shortened design cycles by 15 percent
- Cut development costs by 7 percent
- Increased design reuse by 30 percent
- Accelerated time to market despite increased product customization

Since its founding in 1984, Karis Co., Ltd., has developed and manufactured many disinfection, sterilization, and sanitization equipment products, using applied ultra-violet (UV) rays, electric heating cabinets, hot pack units, and applied infra-red (IR) rays. With a commitment to product quality and customer satisfaction, the Korean company pursues innovation in product design by closely listening to its customers, routinely conducting R&D, and strategically tapping emerging product development technologies.

For many years, the company has utilized SOLIDWORKS® Premium 3D design and analysis and DraftSight®



Managing data in the cloud facilitates design reviews and the sharing of data, and also makes it very easy to collaborate between departments, such as using the Product Release Engineer role to collaborate on BOM [bill of materials] work with the production department.

— DugWoo Lee, Managing Director

Enterprise 2D design software to develop its products, recently adding SOLIDWORKS Flow Simulation analysis software. However, as the company faced increasing customer demand for product customization related to the COVID-19 pandemic—creating the need to develop products more quickly and cost-effectively—and growing concerns about data security due to the rising threat of cyberattacks, Karis began evaluating cloud-based product development solutions, according to Managing Director DugWoo Lee.

“We are always looking for new development tools and technologies that help us develop innovative products more quickly and at less cost,” Lee stresses. “For example, our customers are increasingly requesting higher levels of product customization, and it’s too costly and takes too long to make and test prototypes. That’s why we added SOLIDWORKS Flow Simulation. In the past, we outsourced simulation, but that took longer and cost more. Now, we conduct the simulations ourselves, saving time and money.”

Similarly, Karis sought out cloud-based development tools in 2022 to make its development processes more

efficient and learned about **3DEXPERIENCE** Works solutions from Node Data, its SOLIDWORKS reseller. “We wanted to shorten time to market even more and were becoming increasingly concerned about the safety of our data,” Lee recalls. “We decided to implement **3DEXPERIENCE** Works solutions right away to address these objectives after learning about cloud data management and the ability to store data in and access data from the cloud.”

Karis chose to add collaboration, data management, and communication solutions from the 3DEXPERIENCE Works portfolio—including Collaborative Designer for SOLIDWORKS, Collaborative Industry Innovator, Product Release Engineer, and 3DSwymer roles—to its SOLIDWORKS Premium software installation. The innovation portfolio leverages the cloud-based 3DEXPERIENCE platform to connect a business’ people, data, and applications in a single, unified, collaborative environment. “We were confident that we could resolve our process and data security issues with 3DEXPERIENCE Works solutions,” Lee says.

### **SECURING DATA, BOOSTING COLLABORATION**

Although the initial impetus to implement **3DEXPERIENCE** Works solutions was to safeguard the company’s product development data in the cloud, Karis has also realized much greater collaboration among personnel and departments since adding the solutions, contributing to the company’s productivity gains. “We were becoming increasingly worried about the potential for a cyberattack, so when we learned that **3DEXPERIENCE** Works solutions would allow us to safely manage, store, and protect our data in the cloud, we decided to install the solutions right away,” Lee notes.



In addition to shortening development time and costs, **3DEXPERIENCE** Works solutions are helping Karis boost collaboration, increase design reuse, and safeguard its data in the cloud.

“Now, all design data and related documentation created in SOLIDWORKS are uploaded to the cloud via **3DEXPERIENCE** Works solutions,” Lee continues. “Managing data in the cloud facilitates design reviews and the sharing of data, and also makes it very easy to collaborate between departments, such as using the Product Release Engineer role to collaborate on BOM [bill of materials] work with the production department. Personnel with access and approval rights can access the **3DEXPERIENCE** platform from anywhere and at anytime, such as during business travel, in our office, or at home. With this approach, the continuity of work progresses while we keep our data safe and protected.”

## GREATER CUSTOMIZATION, SHORTER DESIGN CYCLES, LOWER COSTS

Much of the demand for product customization was associated with new sterilization, disinfection, and sanitization requirements related to the COVID-19 pandemic. Karis has not only leveraged **3DEXPERIENCE Works** solutions to meet growing demand for customized products but has also done so while shortening design cycles and lowering development costs, contributing to faster times to market. “Due to the COVID-19 pandemic, our customers are increasingly requesting customized products,” Lee points out.

“Because we can use SOLIDWORKS Flow Simulation to validate customer requests without making prototypes and **3DEXPERIENCE Works** solutions to collaborate and manage data, we are able to release products more quickly,” Lee adds. Since implementing **3DEXPERIENCE Works** solution, Karis has reduced development time by 15 percent and development costs by 7 percent.

## FACILITATING DESIGN REUSE

One of the ways that **3DEXPERIENCE Works** solutions are helping Karis realize productivity gains is through design reuse. “Traditionally, it was difficult to find data that had already been designed, resulting in a longer development cycle

**Karis Co., Ltd.**

**23-19, Wolha-ro 671beon-gil**

**Haseong-myeon, Gimpo-si  
Gyeonggi-do, Republic of Korea**

Phone: +82 31 987 6005

**For more information**

[www.karis.co.kr](http://www.karis.co.kr)

**VAR: Node Data Co., Ltd., Seoul, Republic of Korea**

due to the need to duplicate design data,” Lee explains. “However, with **3DEXPERIENCE Works** solutions, we are able to prevent duplication of data and reuse designs because it is very easy to use 6W Tags [Who, What, When, Where, Why, and hoW] to quickly retrieve existing design data stored in the cloud and apply it to new designs.

“This capability alone has increased design data reuse by 30 percent,” Lee says. “Because Dassault Systèmes offers SOLIDWORKS desktop solutions and **3DEXPERIENCE Works** cloud solutions, we can choose the solution and new features and improvements to add every year with the release of new versions, so we can improve design efficiency, accelerate time to market, and realize good ROI [return on investment].”

## Our **3DEXPERIENCE**® platform powers our brand applications, serving 11 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 250,000 customers of all sizes in all industries in more than 140 countries. For more information, visit [www.3ds.com](http://www.3ds.com).



**3DEXPERIENCE**