

# ZWSOFT Donated Complete 2D and 3D CAD Solutions to Korean Startup THE WAVE TALK

Recently, ZWCAD Korea has donated a batch of 2D and 3D CAD to a Korean Startup, THE WAVE TALK 은 KAIST, which is famous for its innovative bacteria sensor.

This action not only aims at encouraging and supporting startups in various fields for their better growth and development, but also hopes that the innovations of THE WAVE TALK can greatly promote the global food security.

## **Building the Atlas of Bacteria**

Founded by Kim, Yeong Deok in July, 2016 with technology developed by Park, Yong Keun, THE WAVE TALK is devoted to designing, innovating and manufacturing a new type of sensor detecting pathogenic bacteria promptly based on the “time-reversal mirror” theory.

Nowadays, in food or bottled water factories, the way of bacteria detection is still traditional: firstly some samples of the products, like bottles of water, will be randomly selected from the production line, and then sent for examination by expensive precision equipment that takes hours or even days to finally detect the bacteria. The problem is obvious – it’s expensive, time-consuming and cannot cover every single product.

Now with this new type of sensor installed in each production line, pathogenic bacteria can be detected precisely in real time within a second for every bottle of water, not letting off a single bacterium. And the cost of detection is greatly cut down, saving lots of budget for the factories.

In the future, they also hope that this technology can enter into every family at an affordable price, safeguarding the daily food security for more people.

This is really a blessing for food processing, healthcare and homecare industries. Their ambition and enthusiasm towards the great cause of utilizing high technology to promote global food security and improve people's life quality are inspiring and moving. With a bright and promising prospect, THE WAVE TALK is very likely to make a big splash.



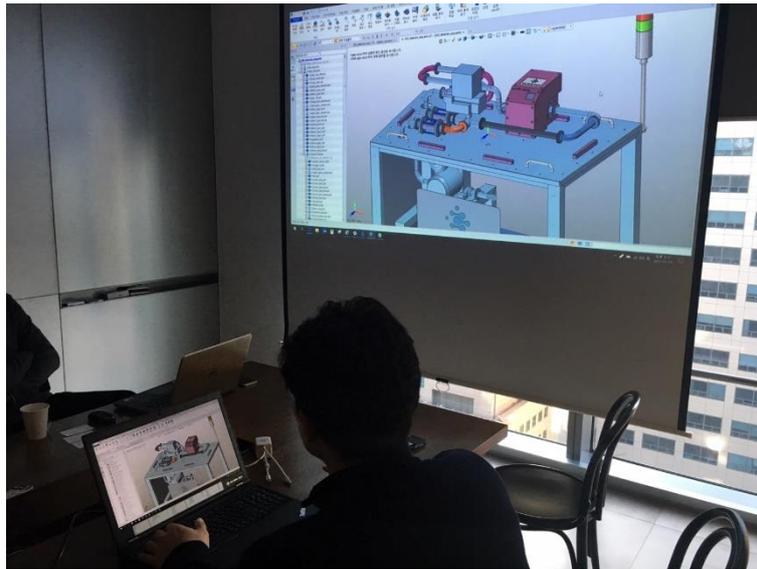
*Figure 1. Conducting the bacteria detection experiment with the sensor*

### **ZWSOFT: More a Helper than a Donator**

This great ambition of THE WAVE TALK is in dire need of a professional and complete CAD solution to give them a strong push. Fortunately, ZWSOFT is there to help.

One of the senior technicians from THE WAVE TALK told us that ZW3D and ZWCAD have run through the whole process from designing at the beginning to delivering at the end.

First of all, the general design plan is drafted according to the product concept. Then components are designed with ZW3D, after which they will be assembled to produce a complete detecting module, which is their core product. With the detecting module done, it is necessary to ensure that it performs well in practice. So the virtual production environment is built for simulating the real operating conditions as well in ZW3D.



*Figure 2. Technician from THE WAVE TALK is demonstrating how they use ZW3D to design*

After the design and testing of the detecting module, the 3D model for each component of the detecting module will be exported as 2D plots from various views in the form of .dwg and imported to ZWCAD for further detailing. This process is smooth and reliable since perfect compatibility is promised by using the 2D and 3D CAD from the same company, ZWSOFT.

Then they can make annotations and adjustments easily on the exported 2D drawings to specify production details, and make their drawings clearer, simpler and more adaptable to the actual production use and the industry manufacturing practices. When all the drawings are ready after the post-

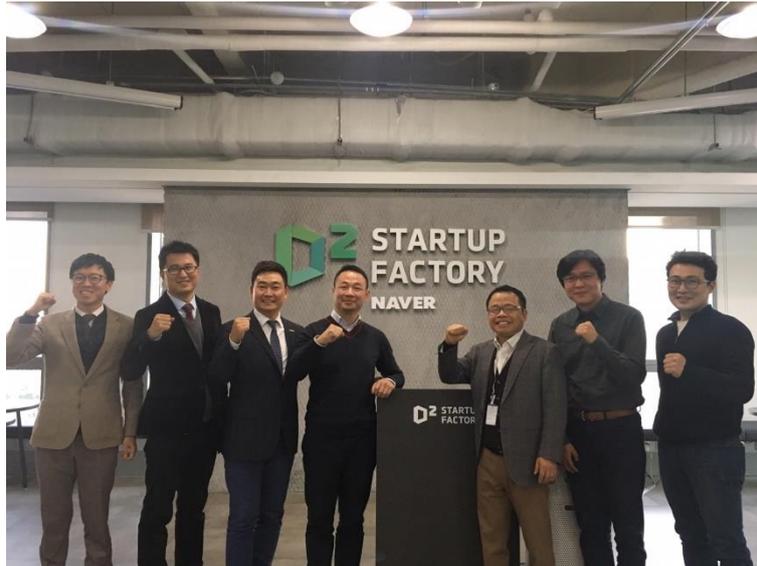
processing by ZWCAD, they can be printed on paper or exported to various formats such as PDF, making it more convenient to deliver to the downstream supply chain for manufacturing.

When they want to modify or improve their design afterwards, it's also easy since the design in ZW3D supports both History Tree and Direct Edit, making the changes of design a piece of cake and ensuring that they can keep advancing forward without concerning about historical issues.

### **From Small to Great**

Although startups are usually at small size, there is a great potential inside them. ZWSOFT would like to give a hand to these startups, to help them develop from small to great. Realizing the toughness of starting a new business, we spare no effort to give the startups support and encouragement. We are happy to provide THE WAVE TALK with the complete CAD solution connecting designing, processing and manufacturing seamlessly, and look forward to supporting more and more excellent startups like them.

On the other hand, ZWSOFT is a small member in the world, but with a great vision lying within. It is our honor to be part of such a great cause as the amazing technology innovated by THE WAVE TALK, which greatly enhances the detection level of food-processing industry, avoiding the pain caused by bacteria and boosting global food security. We are also glad to see that the CAD we offer is not merely software, but a tool accelerating the design of amazing products that make people's life better.



*Figure 3. ZWSOFT team and THE WAVE TALK team*

Starting small, achieving big. We will never cease our steps to support startups and contribute our strength to the cause benefiting worldwide people.