



## Leadyoung Upgrades Electrostatic Precipitators with ZW3D



**INDUSTRY**  
Machinery & Equipment

**PRODUCTS**  
Electrostatic precipitators

**WEBSITE**  
[www.leadyoung.net.cn](http://www.leadyoung.net.cn)

## ❓ CHALLENGES

- Require a 3D CAD solution to replace traditional design software
- Minimize learning costs during the transition to new design software
- Low efficiency in product design

## 💡 SOLUTION

ZW3D

## ✅ RESULTS

- ZW3D brings more intuitive designs that facilitate product innovation
- Designers can master and apply ZW3D for product design in a short period of time
- ZW3D's parametric design capability improves the efficiency in modification and reduces errors

Established in 1996, Leadyoung Environment (hereinafter referred to as “Leadyoung”) is a Chinese company specializing in the research and development, production and sales of electrostatic precipitators. Since its inception, the company has committed to environmental protection and has achieved numerous breakthroughs in industrial dust control equipment. While the current smoke and dust emission limit value at the outlet of electrostatic precipitators in China is 20 mg/m<sup>3</sup>, Leadyoung is the first and only company in China that is capable of achieving a value below 10 mg/m<sup>3</sup>.



Figure 1. Leadyoung new office building (under construction)

According to Tang Chaoqi, Manager of Engineering Technology Center, the electrostatic precipitator is a typical large-scale non-standard mechatronic equipment. It is composed of two parts: the

electrostatic precipitator body and electrical control system, and is implemented through EPC (Engineering Procurement Construction) that includes product development, prefabrication, on-site installation and adjustment.

Leadyoung has adopted ZWCAD as early as 2019 and began using ZW3D in early 2023. Currently, ZW3D is primarily used for product development and engineering design, including 2D structure design, 3D structure design and other crucial design scenarios. Tang Chaoqi said, “In the 5 years of collaborating with ZWSOFT, we upgraded our design tools and completed the transition from 2D design to 3D design. This shift played a vital role in promoting innovation and digital transformation of our company.”

## Switching to ZW3D Smoothly and Quickly

During the transition to a new design platform, it is inevitable to encounter a series of challenges such as changing your operation habits. Fortunately, designers at Leadyoung found that switching to ZW3D was a smooth process. One reason for this is its ease of use. Its functions are easily accessible and comprehensible with clear operational logic, so new users can master it within a few days.

Additionally, the responsive and professional support provided by ZWSOFT was instrumental. Whenever issues arose, ZWSOFT team promptly addressed them, enabling designers to use ZW3D in their real work smoothly.



Figure 2. A designer used ZWCAD to create a transformer installation drawing

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— Tang Chaoqi, Manager of Engineering Technology Center

## Reducing Errors and Improving Design Efficiency

Lian Tianhua, Head of Engineering Technology Center, said, “Enterprises play a crucial role in the industry chain of CAD software. It is only when these enterprises use CAD applications in real scenarios that these applications can truly demonstrate their value. For us, the greatest value of ZW3D is to help

us reduce design errors and improve design efficiency.”

ZW3D’s flexible modeling capability allows Leadyoung to easily design products. Its powerful parametric design ensures the traceability of all product parts. Its various specialized modules including structure, sheet metal and piping further elevate its efficiency in product design.

Lian Tianhua added, “We are planning to use ZW3D as the design platform for the steel structure of the electrostatic precipitator body, which will bring a positive influence for our company to achieve innovation and digital transformation.”

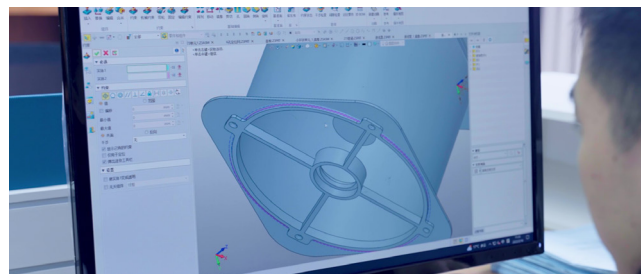


Figure 3. A designer used ZW3D to design a part of an electrostatic precipitator

## Promoting Digital Transformation Together with ZWSOFT

Digitalization is essential for the sustainable development of the modern manufacturing sector. Enterprises specializing in environmental protection equipment should embrace the “dual carbon” strategy, continuously innovate and develop environmentally friendly products.

Xie Youjin, Founder of Leadyoung said, “The shared goal of our long-term partnership with ZWSOFT is to establish a safe and sustainable digitalization system. ZWSOFT is one of the leading CAD software companies with a high reputation in the global market. Collaborating with ZWSOFT is our first step in the digital transformation journey and we believe it can contribute a lot to our product innovation and digital transformation in the future.”

### ZWSOFT

ZWSOFT has been delivering reliable all-in-one CAx solutions since 1998. With over 20 years of experience, our products have been chosen and trusted by over 1.4 million customers in more than 90 countries worldwide.

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