



WELLTEC Chooses ZW3D to Realize Full Parametric 3D Design of Injection Molding Machines

WELLTEC

INDUSTRY
Machinery & Equipment

PRODUCTS
Injection molding machines

WEBSITE
www.donghua-ml.com

❓ CHALLENGES

- Require full parameter 3D design of injection molding machines
- Need for accurate material calculation and cost management
- Low efficiency in design modification and order delivery

💡 SOLUTION

ZW3D

✅ RESULTS

- Full parameter 3D design capabilities fulfill Welltec's needs
- Automated BOM ensures accurate material calculation and cost management
- Flexible functions accelerate design modification and order delivery

Established in 1982 in China, Welltec Machinery Limited has evolved and become one of the market leaders in the field of injection molding machines through years of technological advancements in rubber and plastics.



Figure 1. Welltec's factory in southern China

Chen Xuming, Chief Engineer at Welltec, mentioned that their product development process involves multiple stages, from market research and 3D design to manufacturing.

Previously, they used various programs, including SolidWorks®, for different tasks such as design, simulation, and drawing review. This led to increased time and effort spent on data exchange and communication between departments. After adopting ZWSOFT's integrated solutions, they have greatly reduced the time for data exchange and

improved team collaboration, thus enhancing productivity.

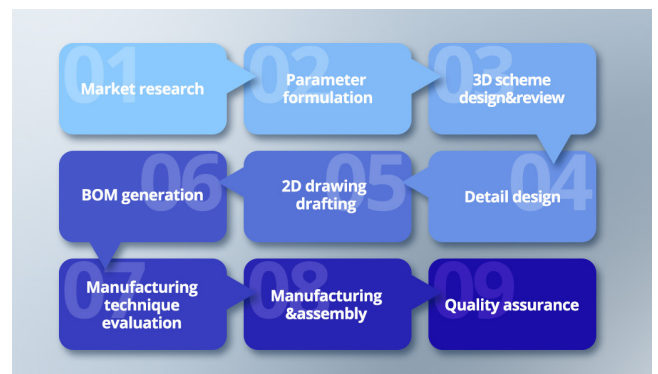


Figure 2. Welltec's product development process

Reducing Errors and Costs through Data Track and Automation

Data traceability is crucial for error reduction in the design and production process. ZW3D's flexible modeling capabilities have enabled Welltec to achieve fully parametric 3D design for nearly 10,000 parts of each injection molding machine, ensuring traceability for all product parts.

The most important thing for cost reduction is to accurately evaluate costs. ZW3D can automatically generate bills of materials (BOMs) of 3D models with one click. This reduces manual work and minimizes errors.

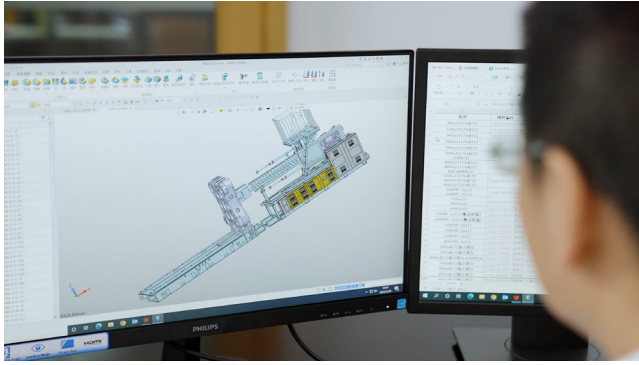


Figure 3. An engineer at Welltec used ZW3D for design

Accelerating Order Delivery with Quick Design Modification

Design changes are frequent for standard products as they are often iterated. Hence, the ability to quickly modify designs is crucial for Welltec to ensure prompt order delivery. The implementation of ZW3D helps Welltec respond to design changes with confidence and ease.

ZW3D offers the flexibility to import custom parts into the part library. Welltec can classify and store the same type of standard parts. During the phase of design modification, they only need to select a new model in the library for quick replacement, improving design efficiency.

Besides that, the Direct Edit in ZW3D allows for quick and easy modification. It can directly identify features and users can make desired changes, such as moving, mirroring, arraying, or simplifying them. In this way, they can modify models without rolling back the modeling history.

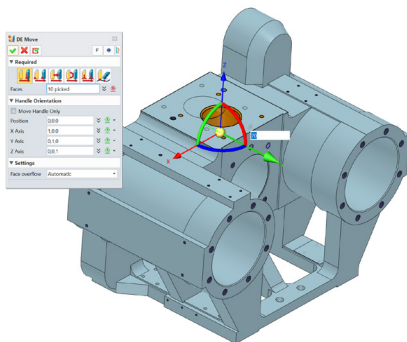


Figure 4. Direct Edit in ZW3D

Additionally, with user-defined features in ZW3D, Welltec can further improve design efficiency by encapsulating several design operations into a combined feature. For example, when users design an injection molding machine, they often need to create mounting holes through repeated operations. With user-defined features, Welltec can use the combined feature to generate the corresponding mounting holes in a single operation.

“ If design, simulation, and manufacturing can be integrated into one software, it will save us a lot of money and give us a competitive edge. We are happy to cooperate with ZWSOFT and we believe we can achieve this goal with them. ”

— Chen Xuming, Chief Engineer

Exploring More Possibilities of ZWSOFT Solutions

In addition to utilizing ZW3D for fully parametric 3D design, Welltec also uses ZWCAD MFG to view drawings and reuse historical data, and ZW3D Linker to integrate ZW3D into its PLM system. Furthermore, they are now actively trying ZW3D's simulation and manufacturing solutions.

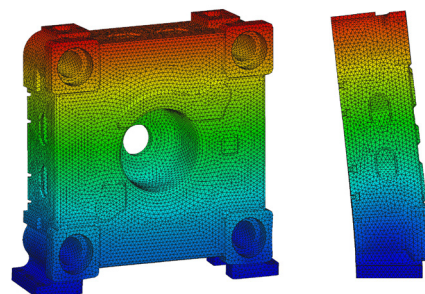


Figure 5. ZW3D's simulation solution

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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