

CASE STUDY: Commercial Tool Group finds CADfix to be the Right Tool for the Job

CADfix

CADfix is the leading software solution for CAD model translation, repair, healing, defeaturizing, and simplification. CADfix tackles the ever-present problems of 3D model data exchange and re-use between different engineering applications, removing the barriers that prevent re-use of solid models in design, analysis, and manufacturing systems.



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ITI is the global leader providing reliable interoperability, validation, and migration solutions for product data and related systems. ITI solves complex product data interoperability problems so the world's leading manufacturers can focus on making great products. ITI is a wholly owned US-based subsidiary of Wipro, Ltd, and exists within the Wipro Engineering business. Wipro Engineering provides customers with a platform to innovate and engineer the next generation of products and platforms at scale.



Commercial Tool Group (CTG) is driving the industry to produce the highest quality products meeting delivery requirements at competitive prices. CTG offers a comprehensive manufacturing solution and possesses the project and data management expertise to design, build and prove out all of their solutions. They are comprised of three business units: Commercial Tool and Die, CG Plastics and CG Automation and Fixture. The original business unit Commercial Tool & Die, Inc. (CTD) is a family owned and operated company originally founded in 1953.

Challenge

CTG has a 70-year history in mold and tool and die design. The industry is currently seeing many experienced designers retiring, and the expertise does not exist locally to fill this void. Consequently, more and more OEM's are relying on overseas design houses for the initial part CAD design. While the upfront cost of this approach is attractive, the overall quality of the outsourced design data can be poor and not always suitable for the mold and tool design process.

Need for model repair and healing

The deteriorating quality of initial CAD part design results in considerable model repair and rework required to get a usable quality part into the mold design system. This additional required model repair adds to the overall project cost and timeline. What is needed is a specialized tool for efficient multi-CAD translation, repair and healing.

Solution

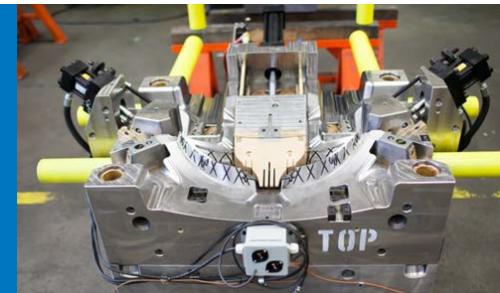
CADfix is an industry leading CAD model translation, repair and healing solution with over 30 years of history and a worldwide customer base in engineering and manufacturing.

CADfix features include:

- Import and export interfaces for most native CAD formats and data exchange standards
- Advanced healing and repair engine to correct flaws within the CAD model
- Batch, wizard, and diagnostic modes for automatic and interactive model repair

Results

CTG has been using CADfix for over 20 years to repair and translate incoming CATIA design models into valid solid models in NX's mold design application. They use a combination of automated workflows and the diagnostic driven repair approach to achieve a valid NX solid model.



CTG Data Manager Dale Bales says "**CADfix is an integral part of our mold design process. It provides an efficient and reliable way to repair bad incoming CAD data and get us to a workable mold design in NX as soon as possible. We avoid project delays and save resources by using CADfix to repair incoming CAD data.**"

Dale calculates that he processed 250 files through CADfix in 2022, saving at least 1 hour of work per file using CADfix. With a designer average labor rate of at least \$75/hour, that results in an actualized savings of nearly \$19,000 per year.