

CASE STUDY: Millbrook Group Transforms CAD Workflow Efficiency with CADfix, Cutting Model Repair Time from Days to Minutes

CADfix

CADfix removes barriers preventing the reuse of solid models. By providing an extensive set of geometry manipulation tools for importing, repairing and exporting data, CADfix maximizes the reuse of CAD data in downstream applications.

By detecting and repairing a range of CAD geometry issues, the user-friendly CADfix Wizard interface ensures that the model is correctly defined and suitably flavored for the downstream application.

CADfix also offers model de-features utilities, which are popular with CAE analysis users who require automated de-features operations.

CADfix is packaged as a desktop or server solution, with extensible modular functionality dependent upon the end user's source and target systems. The application may be integrated into PLM or workflow automation tools. CADfix also serves as a geometry pre-processor within proprietary CAE-centric OEM applications.

"Before CADfix, our team was spending valuable time translating and repairing customer models. With CADfix we've eliminated expensive model rework. Now we can focus on better servicing our customer needs and project deliverables."

- Ryan Holden, Design Office Supervisor, Millbrook

Overview

manroland AG is one of the leading printing systems manufacturers and the world's market leader in web offset. Web-fed and sheet-fed offset presses provide tailor-made solutions for publishing, commercial and packaging printing – from company brochures to newspapers with circulations running into the millions. A worldwide network of about 100 sales and service centers market manroland's own products and inkjet-based digital printing solutions from Océ as well as process compliant system components and pressroom products.

manroland also has a distinguished history, having first entered the printing market in 1845. The secret of this longevity is a combination of a commitment to customer service – as evidenced by its operational presence in so many global markets– and a continuous focus on developing its products and services to reflect changing technology and market conditions. Its service-focused PRINTVALUE is a perfect example of manroland adapting its business model to respond to changing global demands for printed matter.

Challenges

The Millbrook Group provides vehicle test, validation and engineering services to customers in the automotive, transport, tire, petrochemical, defense and security industries. The nature of their business requires Millbrook to work with CAD files from multiple sources and in multiple formats. When files are received, they are not always optimised or in a format that Millbrook can swiftly import and work with in their native CAD format. As a result, Millbrook engineers found themselves spending days working to repair models. To obtain optimal efficiency and cost effectiveness, Millbrook also demand a high level of support and responsiveness from their interoperability provider.

Solution

Millbrook managers contacted ITI after attending a tradeshow, and arranged for a demonstration. CADfix successfully repaired a set of test models in a matter of minutes, saving days of effort. CADfix demonstrated a complete interoperability solution. A short CADfix evaluation was followed rapidly by a product purchase, implementation and training.

Result

In order for Millbrook engineers to deliver on their customer requirements, they need to be both nimble and accurate. CADfix enables both. Millbrook receives large models of vehicle bodies from a variety of sources in a variety of CAD packages. These need to be converted into the Millbrook CAD system of choice for any given project. CADfix provides them the capabilities to convert the models and to efficiently repair any faults they find within the models.

Because CADfix has the ability to exchange multiple geometry formats, repair poor quality geometry, as well as de-feature and simplify complex models, Millbrook can turn projects around more quickly, helping the company achieve better bottom line results. CADfix also gives Millbrook confidence that model geometry is accurate, which is critical to the success of their business.

