

Mentor Graphics' Mechanical Analysis Division brings you FloEFD (Engineering Fluid Dynamics) – a different breed of CFD software that fits within your mainstream design environment enabling you to create heat transfer and fluid flow simulations directly from your Autodesk Inventor models.

FloEFD combines all simulation steps – model preparation and mesh generation to solving and seeing the results in one easy to use interface.

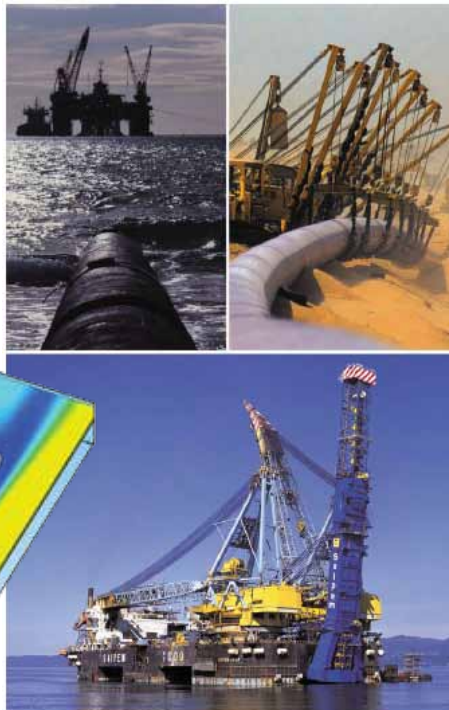
Effortless MCAD to Analysis ...

Unlike other CFD tools, FloEFD was developed for engineers by engineers so it works the way you do – as a matter of fact, most engineers report that they can use FloEFD with less than 8 hours of training.

Together with Autodesk Inventor, FloEFD puts a powerful simulation tool on your desk. Now you can create a new model with Inventor and:

- Use the native Inventor geometry for analysis – don't recreate everything from scratch
- Understand and improve your model performance and reliability
- Reduce prototyping costs drastically by replacing physical tests with virtual tests
- Shorten the development cycle by conducting "what-if" tests quickly
- Reduce errors and create better products

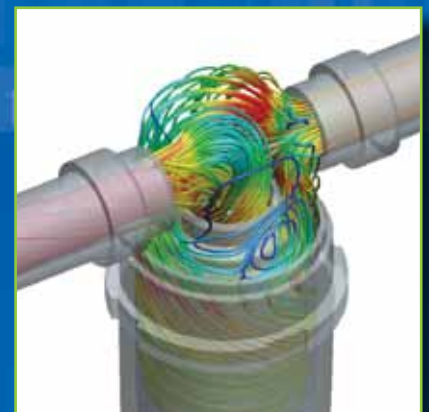
With FloEFD you do not need to worry about oversimplifying your Inventor solid model to get it analysis-ready. Its advanced meshing technology makes analysis of real-world problems a breeze so you can get on with the business of improving your products without becoming a full-time fluid dynamics specialist.



Customer Testimonial

" We have been using traditional CFD software to analyze our Autodesk Inventor solid models for the last couple of years. But we found the analysis process too time-consuming because our software was unable to meet the rigorous demands of our development timescale. FloEFD on the other hand matches our needs for shortened design time and ease-of-use. "

Dr. Zafer Ayaz, Naval Architect at Saipem ENI uses Inventor with FloEFD





“ CFD simulation dramatically reduced the time needed to meet our customer’s demanding specification. Without CFD, we would have had to go through a minimum of three prototypes, more likely several more. With CFD we moved from the beginning of the project to the development of an acceptable software prototype in only one day. ”

T. Preble, Project Engineer at Shaw Aero Devices uses Inventor with FloEFD



Image courtesy of Watts Industries

Please visit our website at:
www.mentor.com/mechanical

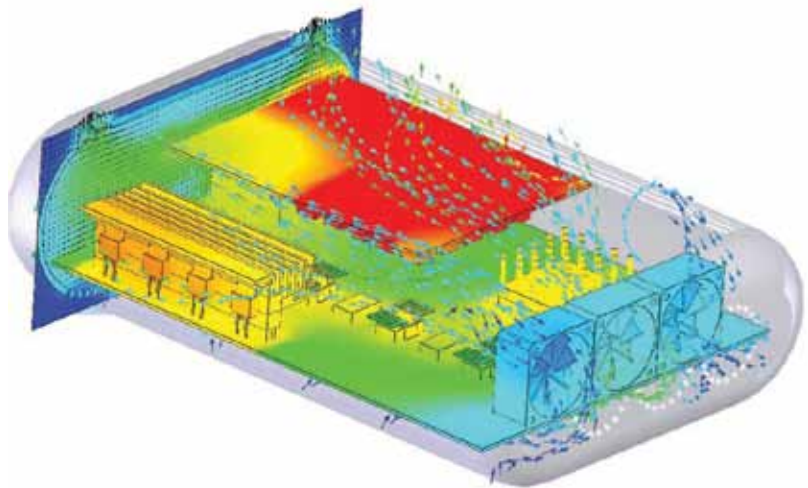
“What-if” Testing Made Easy with Inventor and FloEFD

The real power of FloEFD comes from the ease with which you can conduct “what-if” analysis. FloEFD makes it easy to modify your Inventor models and then immediately analyze them.

The process is quite simple. You create your base model and analyze it. Then create multiple variations of your design by modifying the solid model and without having to reapply loads, boundary conditions, material properties etc. you can analyze them. Simply compare the results among the many options to choose your best possible design.

When you are satisfied with your design, publish your report at a touch of a button. You can even publish a fully interactive 3D dynamic plot and share it with your colleagues or customers.

In short, with FloEFD you can turn Inventor into a powerful simulation tool.



“ We didn’t have any difficulty using existing solid models with FloEFD. By using this system we have been able to develop a complete range of products instead of just one or two products. Testing, which used to take 2 weeks, now takes only one day; therefore, our production schedule has shortened dramatically. ”

R. Aarntzen, R&D / Engineering Manager at Watts Industries uses Inventor with FloEFD