

A woman with long brown hair is sitting in a grey office chair, facing two computer monitors. The left monitor shows a 3D model of a car with colorful streamlines representing fluid flow. The right monitor shows a 3D model of a mechanical part, possibly a valve, with a color-coded stress or temperature distribution. A teal semi-transparent box is overlaid on the right side of the image, containing the title and subtitle.

Simcenter FLOEFD for PTC Creo

Fully CAD-embedded computational fluid dynamics (CFD) software

Simcenter™ FLOEFD™ for Creo is an easy-to-use yet powerful Computational Fluid Dynamics (CFD) analysis tool that is fully embedded in Creo. It enables engineers to frontload simulation by moving CFD simulation early into the design process; thus, enabling design engineers to examine and evaluate design options earlier to obtain optimized product performance and reliability.

Simcenter FLOEFD is easy to use and features unique intelligent technologies that make it fast and accurate:

- Use of native Creo CAD data – no translation or fluid body creation
- Automatic recognition of geometry changes – geometry and simulation data are synchronized
- Fast automated mesher – fast and easy SmartCell™ meshing
- Unique solver – provides accurate results fast for highly complex geometry
- Powerful parametric study and design comparison functionality for easier what-if analysis

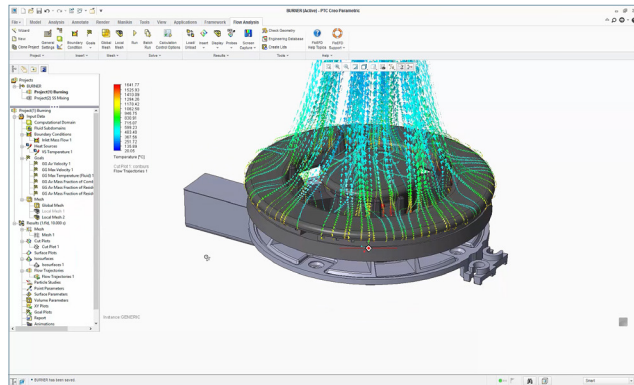
This unique combination has helped thousands of engineers reduce their overall simulation time by as much as 75 percent.

Simcenter FLOEFD for Creo – the best frontloading CFD solution for engineers using PTC Creo.

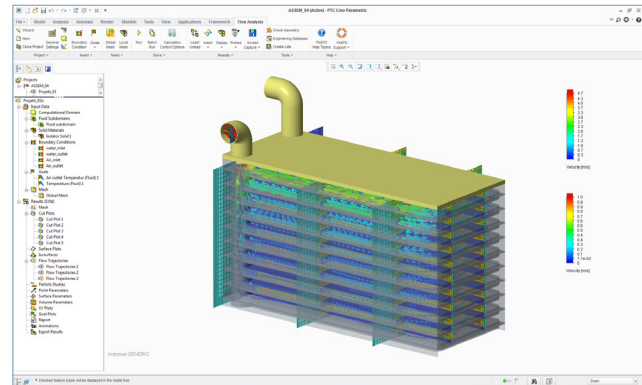
“CAD-embedded CFD makes it possible to determine simulation results nearly as fast as we can change the design. The result is that we were able to improve the flow rate of our new CO₂ valve by 15 percent while eliminating about 50 prototypes and reducing time to market by four months.”

Ventrex

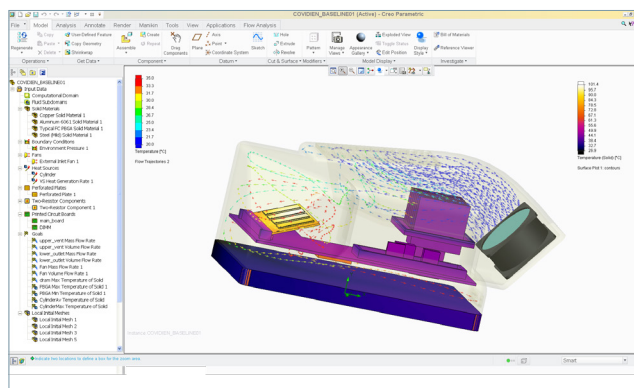
Tightly integrated into PTC Creo



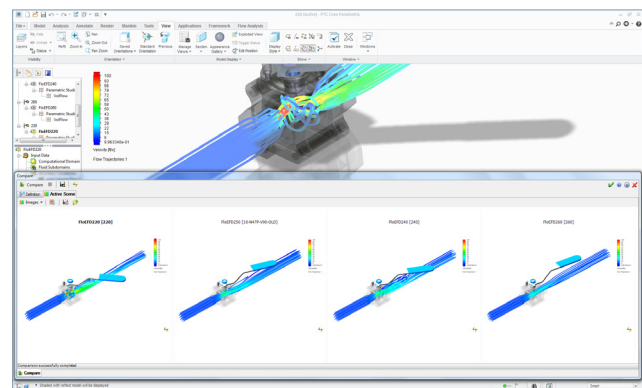
Fast and robust automated meshing technology



Intuitive user experience



Parametric studies and design comparison



If you use Creo, take a closer look at Simcenter FLOEFD – the only fluid-flow and heat transfer simulation tool that fits into your design process without requiring you to change the way you design products.

Simcenter FLOEFD results can also be used as pressure and temperature input for structural simulations with Creo Simulate to increase concept design reliability under real working conditions.

Test drive free on the cloud:
www.mentor.com/products/mechanical/floefd/trials