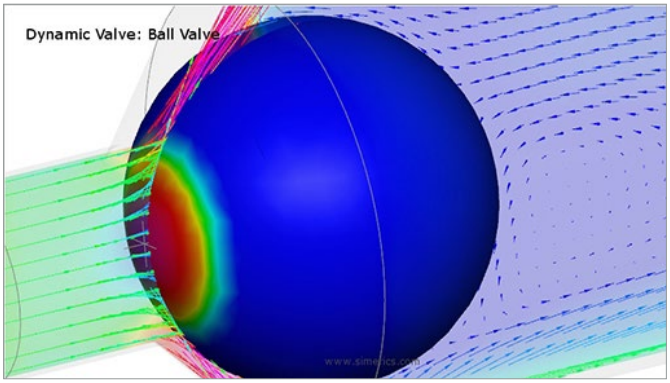
Creo® Flow Analysis Extension

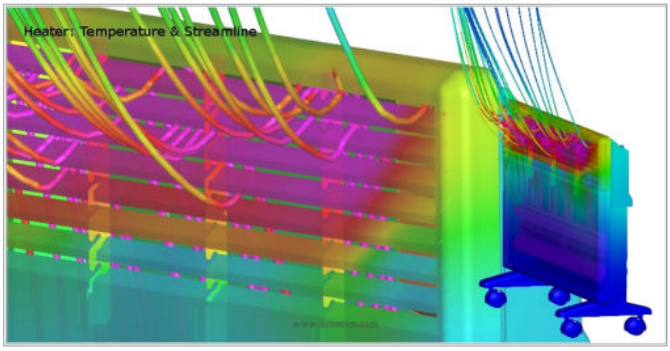
A complete computational fluid dynamics (CFD) solution for product designers and analysts

Creo Flow Analysis extension puts CFD in the hands of every engineer. As products become more complex and timelines shorten, you need a CFD solution that allows you to analyze liquid and gas flow early in your design process. With Creo Flow Analysis extension, you can reduce expensive hardware testing and gain unique insight into your products.

No need to learn a new tool or sacrifice accuracy for ease-of-use. You can perform your analysis in the familiar Creo design environment with the same user interface. We've partnered with Simerics, a leader in simulation software for fluid pumps, valves, compressors, motors, and systems. Now you have a fast, highly-accurate CFD solver integrated into your Creo workflow and made for you, the engineer and designer.

- Part of PTC's portfolio of simulation products designed to fit the needs of engineers
- Integrated CAD and CFD with full associativity
- Easy model creation: one-step creation of solid and fluid domains; automatic creation of high-efficiency, high-quality mesh that maintains shape and aspect ratio; comprehensive physics
- Faster turnaround: proprietary algorithm speeds run-time and convergence on multi cores
- Scalable: three levels of capabilities for users ranging from engineer to analyst.





The Creo Advantage

Creo is the 3D CAD solution that helps you accelerate product innovation so you can build better products faster. Easy-to-learn Creo seamlessly takes you from the earliest phases of product design to manufacturing and beyond. You can combine powerful, proven functionality with new technologies such as generative design, augmented reality, real-time simulation, additive manufacturing and the IoT, to iterate faster, reduce costs and improve product quality. The world of product development moves quickly, and only Creo delivers the transformative tools you need to build competitive advantage and gain market share.

Capability	Creo Flow Analysis Basic	Creo Flow Analysis Advanced	Creo Flow Analysis Premium
Calculate Internal and External Flows	●	●	●
Animate Flow results in real-time	●	●	●
Parallel Processing Simulation	●	●	●
Simulate Flow	●	●	●
Heat Transfer	●	●	●
Turbulence	●	●	●
Particle - Simulate individual particles in the context of the flow		●	●
Radiation - Heat transfer due to emission of electromagnetic waves		●	●
Species - Simulating the mixing of liquids with similar densities.		●	●
Moving/Sliding Meshing - Simulate the movement of individual components in a flow analysis		●	●
Cavitation - Simulates Vapor, Free Gas and Liquid (bubbles) compressibility			●
Multiphase - Used when simulating gas and liquid together			●
Multicomponent - Another mixing capability used for multiple gases and density			●
Dynamics - Simulate interaction of fluids and solids			●

*For real-time directional guidance that includes computational fluid dynamics, please see Creo Simulation Live (CSL).

Platform support and system requirements

Please visit the PTC support page for the most up-to-date platform support and system requirements.

For more information, visit PTC.Com/product/Creo or contact your local sales representative.

Language support

English, German, French, Italian, Spanish, Japanese, Chinese (Simplified and Traditional), Korean, Brazilian Portuguese and Russian.

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