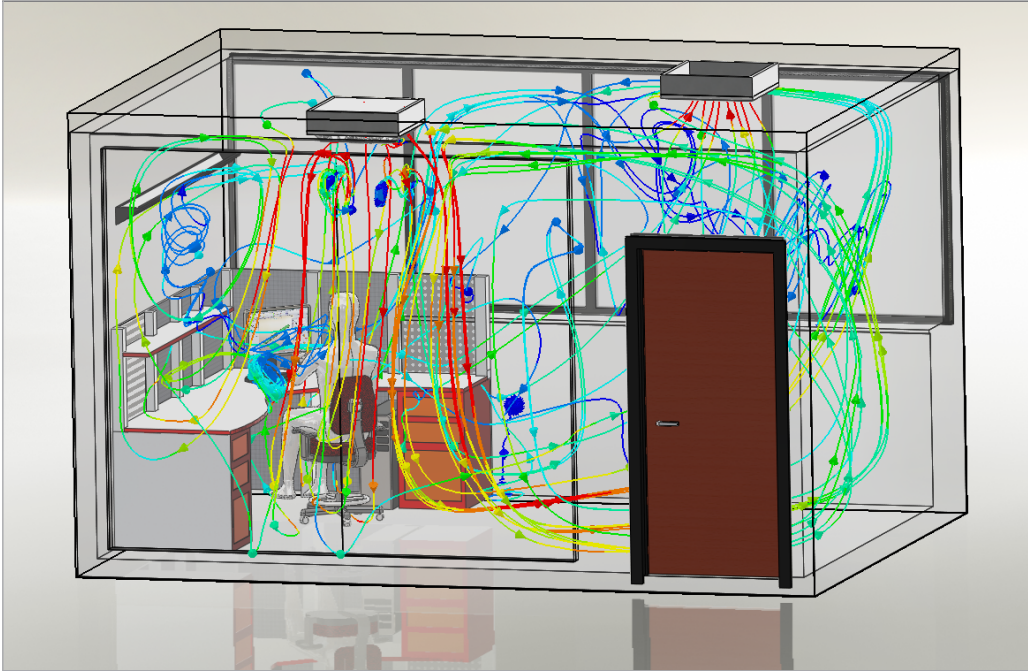


SOLIDWORKS FLOW SIMULATION: HVAC MODULE

The complete HVAC simulation tool



Flow Simulation For Every Engineer

SolidWorks® Flow Simulation software is a powerful computational fluid dynamics (CFD) tool that enables you to quickly and easily simulate fluid flow, heat transfer, and fluid forces that are critical to the success of your design.

HVAC Design Module

The HVAC Design Module for SolidWorks® Flow Simulation evaluates air and gas movement in working and living environments. The HVAC module includes advanced radiation modeling, comfort parameters, and a large database of building materials

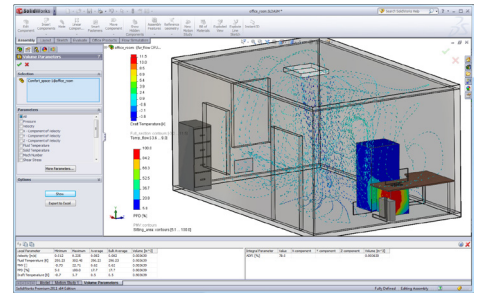
- **Engineering Challenges** - The HVAC Design Module for SolidWorks® Flow Simulation gives engineers great tools to tackle the tough challenges in design efficient cooling systems for people and large scale environments.
- **Airflow Optimization** - Managing the airflow within a large scale environment is key to ensuring the optimum temperature is maintained for the largest number of people possible.
- **Product Thermal Design** - The HVAC module not only simulates the airflow in the environment but also products in the environment. With its enhanced tools set, designers can now analyze products considering more real world behaviors.

SolidWorks Flow Simulation takes the complexity out of computational fluid dynamics for today's designers and engineers. The HVAC module encompasses industry specific tools, practices and simulation methodologies. Together they deliver unrivaled ease of use, power and productivity.

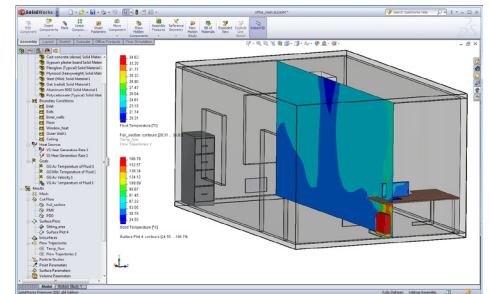
- **Human Comfort Factors** - The effectiveness of environmental control is measured by the human comfort factors. These eight parameters measure both the reaction of people to the environment as well as aspects of the environment.
- **Industry Specific Tools** - Aimed squarely at the mechanical engineer designing air conditioning or large scale cooling equipment, the HVAC Module provides great ease of use with great simulation power.
- **Advanced Radiation Modeling** - The impact of thermal radiation, from the sun, on environments cooling requirements can be large. Understanding the impact of material choices requires sophisticated radiation modeling included in the HVAC module.
- **Comfort Parameters** - Predicted mean vote and predicted percent dissatisfied are the two main (of eight) comfort parameters calculated by the HVAC module. These two parameters indicate where the problem areas are, allowing you to solve these problems ahead time before the cooling system has been built.
- **Engineering Database** - The engineering data base has been greatly enlarged to include a range of building materials and fans. The new materials enable building thermal analysis to be done quickly and efficiently.

The HVAC Module enables design engineers to quickly and accurately model complex air conditioning and cooling systems for thermal analysis. With its combination of ease of use and industry specific tools, the HVAC Module ensures maximum analysis productivity with enhanced simulation fidelity.

Visit www.solidworks.com/simulation or contact your local authorized SolidWorks reseller to learn more.



Visualize human comfort factors with the HVAC module.



Understand the temperature distributions in working and living environments.

Dassault Systèmes
 SolidWorks Corp.
 300 Baker Avenue
 Concord, MA 01742 USA
 Phone: 1 800 693 9000
 Outside the US: +1 978 371 5011
 Email: info@solidworks.com
www.solidworks.com

