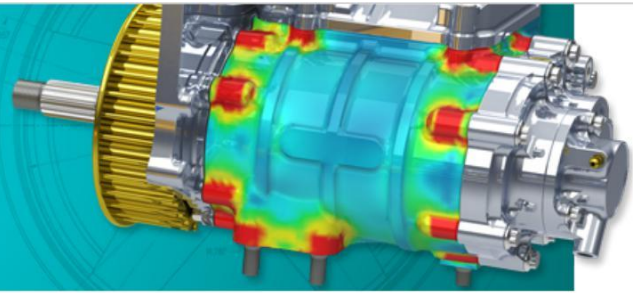


# SIMULATION

Raise the quality of your products, and reduce costs for live prototypes and testing by easily subjecting your designs to real-world conditions.



## SOLIDWORKS SIMULATION MATRIX

	SOLIDWORKS FLOW SIMULATION	SOLIDWORKS FLOW SIMULATION (with HVAC Application Module)	SOLIDWORKS FLOW SIMULATION (with Electronic Cooling Module)
<b>Ease of Use/Intuitiveness</b>			
Fully Embedded in SolidWorks 3D CAD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Learn Fast: Toolbar Menus, Context Sensitive RightMouse Menus, BuiltIn Tutorials, Searchable Help Documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intuitive Wizard to Guide the Flow Simulation Setup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Get Help Fast: Local and Worldwide Support Services Knowledge Base	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Concurrent Engineering</b>			
Fully Embedded in SolidWorks 3D CAD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Full Associativity with 3D Design Changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Support SolidWorks Configurations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SolidWorks Material Properties Support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Post Processing</b>			
Contour, IsoSurface, Surface, Section Result Plot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Display parameter values at specified points	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Display parameter values calculated over the specified surface or volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Display flow trajectories as flow streamlines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
List values on selected entities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compare Mode Tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Animation of Results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Communication</b>			
Customizable Flow Simulation Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
eDrawings® of Flow Simulation Results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Design Comparison Studies</b>			
Design Comparison with Parametric Simulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Fluid Flow Simulation</b>			
Analyze liquid and gas flow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Simulate internal and external fluid flow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Simulate steadystate and transient phenomena	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unique Transitional Turbulence Model	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Handles Subsonic, Transonic, and Supersonic Regimes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Simulate the flow of nonNewtonian liquids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rotating Mesh	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Rotating Regions</b>			
Simulate Fluid Driving motion with rotating regions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wall Motion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Global Rotation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local Region	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Thermal Fluid Simulation</b>			
Simulate heat transfer within fluids and between fluids and solids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consider heat transfer within the fluid and between walls and the fluid (convection)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advanced Radiation Simulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consider heat exchange through solids (conduction)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Include radiative heat transfer between solids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Enriched Library</b>			
Additional Fans from Different Fan Manufacturers		<input type="checkbox"/>	<input type="checkbox"/>
Enhanced Solids Materials		<input type="checkbox"/>	<input type="checkbox"/>
<b>Enriched Library for HVAC</b>			
Large Database of Specific Building Materials		<input type="checkbox"/>	
<b>Thermal Comfort Parameters Simulation</b>			
Predict the degree of thermal comfort of people exposed to thermal environments (PMV, PPD...)		<input type="checkbox"/>	
Estimate air quality of environment (LAQI)		<input type="checkbox"/>	
<b>Advanced Radiation Simulation</b>			
Consider radiation spectrum in heat transfer simulation		<input type="checkbox"/>	

Consider absorption of radiation in solid bodies		<input type="checkbox"/>	
<b>Tracer Study</b>			
Study the flow of a certain admixture (tracer) in the existing carrier fluid		<input type="checkbox"/>	
Measure the effectiveness of a ventilation system in removing contaminated air (CRE)		<input type="checkbox"/>	
<b>Enriched Library for Electronic Cooling</b>			
Library of Thermoelectric Coolers			<input type="checkbox"/>
Library of TwoResistor Components			<input type="checkbox"/>
Library of Printed Circuit Boards			<input type="checkbox"/>
Library of Interface Materials			<input type="checkbox"/>
<b>Dedicated Electronic Cooling Simulation</b>			
Provides Specific models for Electronic Cooling testing (heat pipes, tworesistor components, electrical contact resistance, printed circuit boards (PCB)...)			<input type="checkbox"/>
<b>Joule Heating Simulation</b>			
Consider Electrical Joule heat release in heat transfer simulation			<input type="checkbox"/>