

SOLIDWORKS 3D CAD

Feature Matrix



STANDARD

PRO

PREMIUM

SOLIDWORKS 3D CAD	Create sophisticated part and assembly designs quickly and efficiently.	✓	✓	✓
Part and Assembly Modeling	Handle all aspects of your part and assembly modeling.	✓	✓	✓
2D Drawings	Create production-ready 2D drawings that are always current and clearly communicate how your design should be manufactured and assembled.	✓	✓	✓
Design Reuse and Automation	A range of tools to help reuse existing 3D CAD models and 2D drawings.	✓	✓	✓
Collaborate and Share CAD Data	Product collaboration tools to aid teamwork amongst project stakeholders, safely share data beyond the organization, manage project data, and control design revisions.	✓	✓	✓
Interference Check	Verify that your parts and assemblies will fit, assemble, and operate correctly before starting production.	✓	✓	✓
First-Pass Analysis Tools	Perform basic stress analysis on individual parts.	✓	✓	✓
CAM Programming (SOLIDWORKS CAM)	Powered by CAMWorks®, an integrated 2.5-axis milling and 2-axis lathe programming solution. Included with active SOLIDWORKS subscription.	✓	✓	✓
Design for Manufacturing (DFM)	Tools for reviewing your design for manufacturability early in the development process.	✓	✓	✓
Productivity Tools	Tools for productivity, including design analysis, comparison, checking, and reporting.	✓	✓	✓
Advanced CAD File Import/Export and Interconnect	3D Interconnect opens most major CAD formats natively without conversion. Also includes 30+ CAD translators for import/export.	✓	✓	✓
CAD Libraries (SOLIDWORKS Toolbox)	Easily locate, download, save, and share prebuilt 3D CAD models and commonly reused CAD data.		✓	✓
Design for Cost (SOLIDWORKS Costing)	Easily monitor manufacturing costs as you design and automate the quoting process with this fully-integrated tool.		✓	✓
ECAD/MCAD Collaboration (CircuitWorks)	Share, compare, update, and track electrical design data to quickly resolve electrical-mechanical integration and collaboration problems with this CircuitWorks™ tool.		✓	✓
CAD Standards Checking (Design Checker)	Establish design standards and check drawings (or models) to create consistent and complete designs and documentation.		✓	✓
Collaboration with eDrawings Professional	Quickly and accurately view, measure, and mark-up 3D models and 2D drawings in an email-ready format to improve communication between designers, manufacturers, and customers.		✓	✓
Automated Tolerance Stack-Up Analysis (TolAnalyst)	Automatically check the effects of tolerances on parts and assemblies to ensure consistent fit of components and to verify tolerancing schemes before a product goes into production.		✓	✓
Advanced Photorealistic Rendering (SOLIDWORKS Visualize)	Create compelling, photo-quality visual content of your 3D designs with ease and flexibility for early feedback, marketing, and other purposes.		✓	✓
SOLIDWORKS File Management	SOLIDWORKS PDM Standard provides CAD file management that enables individual users and small workgroups to manage project data, control design revisions, and control access to files.		✓	✓
Reverse Engineering (ScanTo3D)	Import, edit, evaluate, and create solid geometry from scanned point cloud and mesh data.		✓	✓
Time-based Motion Analysis	Visualize and evaluate how your product will perform and move throughout its operational cycle.			✓
Linear Static Analysis for Parts and Assemblies	Linear stress analysis (FEA) to calculate the stresses and deformations of your designs early, before any prototypes are made.			✓
Pipe and Tube Routing	Simplify the design and documentation of piping and tubing for a wide range of systems and applications.			✓
Electrical Cable and Wiring Harness Routing	Build a path of pipes, tubes, or electrical cables for assemblies in a special routing subassembly.			✓
Advanced Surface Flattening	Advanced surface flattening functionality provides control and flexibility for flattening complex surfaces such as sheet metal stock.			✓
Rectangular and Other Section Routing	Route rectangular and round sections that include ducting, cable trays, conveyors, material handling chutes, and other systems.			✓

WE **EMPOWER** THE **INNOVATORS.**

Complete Hardware, Software, & Service Solutions for CAD-CAE-CAM-PLM & Additive Manufacturing

