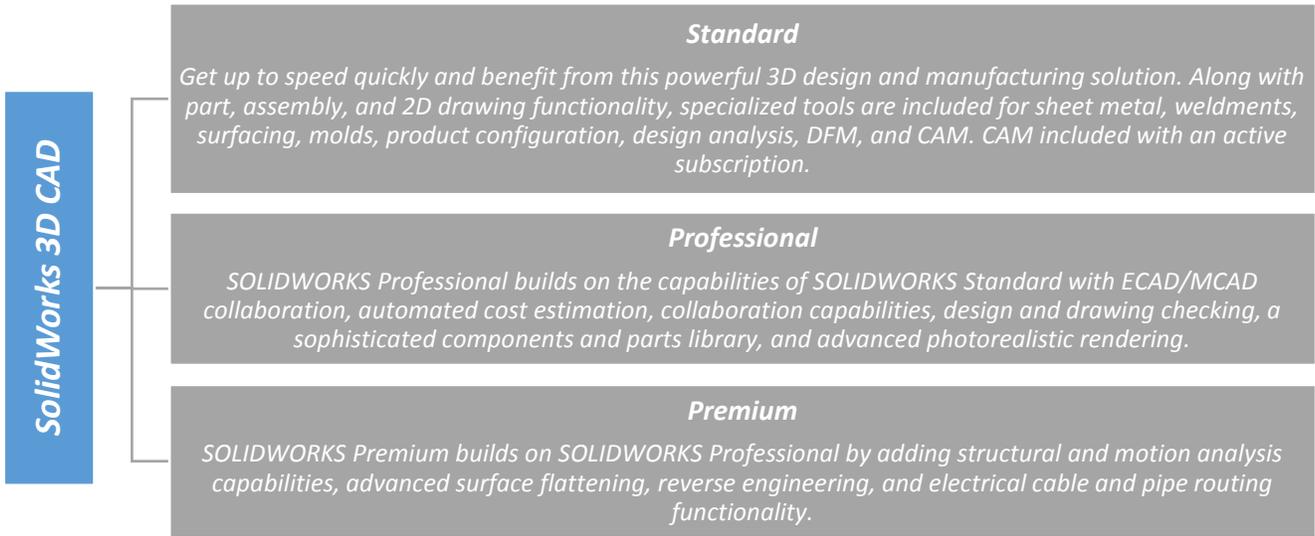
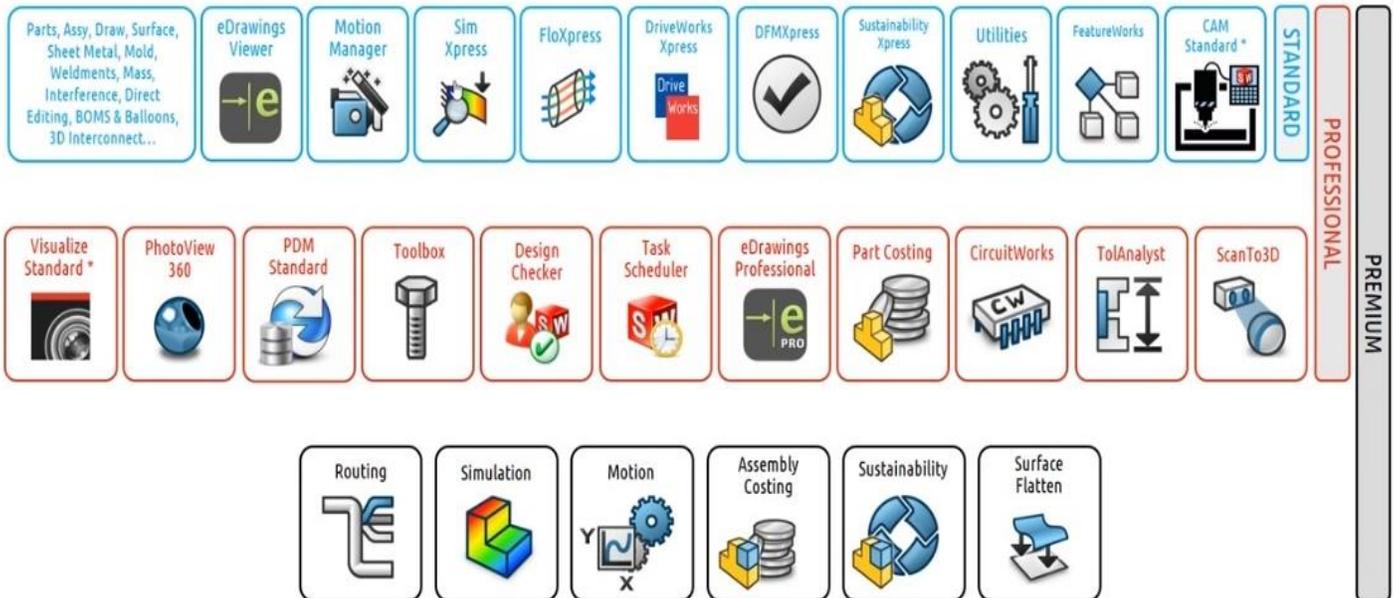


Which SOLIDWORKS 3D CAD Package is right for you?



Summary of Key Points



SOLIDWORKS 3D DESIGN PRODUCT MATRIX

Features	SOLIDWORKS 3D CAD		
	Premium	Professional	Standard
EASY OF USE	√	√	√
Learn Fast: In-Context and Toolbar Menus, Command Search, Built-In Tutorials, Searchable Help Documentation	√	√	√
Work Fast: Hot Keys, Customizable Commands, APIs	√	√	√
Get Help Fast: Local and Worldwide Support Services	√	√	√
PART AND ASSEMBLY MODELING	√	√	√
3D Solid Modeling	√	√	√
Conceptual Design	√	√	√
Assembly Structure Planning: SOLIDWORKS Treehouse	√	√	√
Direct Model Geometry Modification	√	√	√
Large Assembly Design	√	√	√
Advanced Surface Design	√	√	√
Sheet Metal Design	√	√	√
Weldments	√	√	√
Plastic Part Design	√	√	√
Mold Design	√	√	√
2D DRAWINGS	√	√	√
Automatic Drawing View Creation	√	√	√
Automatic Drawing View Updates	√	√	√
Drafting Standards: ANSI, ISO, DIN, JIS, BSI, GOST, GB	√	√	√
Manual and Automated Dimensioning and Tolerancing	√	√	√
Annotations and Symbols	√	√	√
Automatic Bill of Materials (BOM), Exploded Views, Balloon Notes	√	√	√
Hole Tables, Weld Tables, Pipe Bend Tables, Cut Lists	√	√	√
Sheet Metal Bend Notes	√	√	√
Automated Creation of Radial/Cylindrical Exploded Views	√	√	√

DESIGN REUSE AND AUTOMATION	√	√	√
Find Your Data (SOLIDWORKS Search)	√	√	√
Design Automation (DriveWorksXpress)	√	√	√
Part and Assembly Configurations	√	√	√
Reuse 2D and 3D CAD Data	√	√	√
3D CAD Models from Suppliers (3DContentCentral.com)	√	√	√
ANIMATION AND VISUALIZATION	√	√	√
Move Assembly by Dragging Components	√	√	√
Move Assembly with Motors	√	√	√
CAD Videos	√	√	√
Basic CAD Rendering (Real View)	√	√	√
3D Walk Through/Fly Through	√	√	√
INTERFERENCE CHECK	√	√	√
Collision and Interference Detection	√	√	√
Hole Alignment and Thread Checks	√	√	√
COLLABORATE AND SHARE CAD DATA	√	√	√
3D Interconnect for Associative Import of 3D Models	√	√	√
Read Printed Circuit Board Data as 3 D Parts (IFC)	√	√	√
Import/Export Over 30 CAD Formats	√	√	√
Print directly to 3D printers: AMF and 3MF formats	√	√	√
MCAD to AEC: Prepare and export to AEC applications	√	√	√
3D Models for CAD/CAM Integration with CAM Partners	√	√	√
View eDrawings® Files	√	√	√
3D Dimensioning and Tolerancing (Model Based Definition)	√	√	√
2D DXF®/DWG® Data	√	√	√
Maintain and Update Existing 2D Drawings - edit and view DWG® files in DraftSight	√	√	√
2D to 3D CAD Conversion Tools	√	√	√
Convert 3D Solid Parts to Sheet Metal	√	√	√

Intellectual Property Protection (Defeature)	√	√	√
Design Review Markup and Viewing (Large Design Review)	√	√	√
ADVANCED CAD FILE IMPORT	√	√	√
Interactive Feature Recognition and Conversion	√	√	√
Automatic Feature Recognition and Conversion	√	√	√
BASIC ANALYSIS TOOLS	√	√	√
Part Environmental Impact Analysis	√	√	√
Part Structural Analysis	√	√	√
Basic Flow Analysis	√	√	√
PRODUCTIVITY TOOLS	√	√	√
Power Selection Tools	√	√	√
Symmetry Check	√	√	√
Copy Feature Info into Other Features (Feature Paint)	√	√	√
Find and Replace in Drawing	√	√	√
DESIGN FOR MANUFACTURING	√	√	√
Thickness Analysis	√	√	√
Geometry Check for CAM	√	√	√
Compare Parts and Drawings for Changes	√	√	√
Rules-based Manufacturability Checks (DFMXpress)	√	√	√
Draft and Undercut Analysis	√	√	√
Sheet Metal Checks and Flat Pattern	√	√	√
SOLIDWORKS VISUALIZE STANDARD	√	√	
Must be on Active Subscription	√	√	
CAD LIBRARIES	√	√	
Over One Million Standard Fasteners and Components (Toolbox)	√	√	
Beam, Bearing, and Cam Design Wizard	√	√	
Automatic Assembly of Fasteners and Components	√	√	
AUTOMATIC TASK SCHEDULING AND BATCH PROCESSING	√	√	
DESIGN FOR COST & COST ESTIMATION	√	√	

Online Cost Estimates via MySolidWorks Manufacturing Network	√	√	
Compare Manufacturing Costs	√	√	
Automated Manufacturing Cost Estimation	√	√	
Customizable Manufacturing Settings	√	√	
Output Cost Report	√	√	
ECAD/MCAD COLLABORATION (CIRCUITWORKS™)	√	√	
Import/Export of Printed Circuit Board (PCB) Designs	√	√	
Automatic Electrical Component Assembly	√	√	
Two-Way Data Exchange: ECAD to MCAD - MCAD to ECAD	√	√	
IDF, ProStep (IDX) or PADS (*.ASC)	√	√	
PCB Outlines, Keep-Out Areas, Maximum Heights	√	√	
Filter Display for Clarification	√	√	
Compare Board Designs for Differences	√	√	
Design Change Notes	√	√	
ADVANCED PHOTOREALISTIC RENDERING (PHOTOVIEW 360)	√	√	
Photo Quality Images and Animations	√	√	
Control Camera View, Lighting, Materials, Textures	√	√	
CAD STANDARDS CHECKING	√	√	
Verify Designs against Company Standards	√	√	
Automatically Correct Non-Conforming Issues	√	√	
Customize Design Check Rules	√	√	
AUTOMATED TOLERANCE STACK-UP ANALYSIS (TOLANALYST)	√	√	
Worst Case and RSS Maximum/Minimum	√	√	
Identify Highest Contributing Tolerances	√	√	
Automatic Update of Analysis when Design Changes	√	√	
SOLIDWORKS FILE MANAGEMENT	√	√	
User and Group Access Rights	√	√	
File Vaulting	√	√	
Secure Check-in and Check-out	√	√	

Automated Revision Control	√	√	
REVERSE ENGINEERING (SCANTO3D)	√	√	
Import, Edit, Evaluate, and Create Solid Geometry from Point Cloud and Mesh Data	√	√	
Import Adobe® Illustrator® Files	√	√	
Import Image Files and Convert Raster to Vector Data	√	√	
EDRAWINGS® PROFESSIONAL	√	√	
Create and Publish eDrawings Files	√	√	
Allow Measurement in eDrawings Files	√	√	
Enable Markup of eDrawings Files	√	√	
Exploded Views Support for eDrawings Files	√	√	
View Assembly Animations	√	√	
Password Protect Intellectual Property	√	√	
MOTION ANALYSIS	√		
Kinematic and Dynamic Analysis	√		
Inputs: Forces, Springs, Dampers, Gravity, Contact, Bushings	√		
Outputs: Displacement, Velocities, Accelerations, Body Loads, Joint Forces	√		
View/Publish Animations, Graphs, Reports	√		
STRUCTURAL PART AND ASSEMBLY ANALYSIS	√		
Inputs: Variable Forces/Pressures, Full Restraint Sets, Connectors, Gravity, Contact, Materials	√		
Outputs: Factor of Safety, Stress, Displacement, Strain	√		
View/Publish Animations, Graphs, Reports	√		
LIFE-CYCLE ASSESSMENT (LCA) FOR ENVIRONMENTAL IMPACT: SOLIDWORKS SUSTAINABILITY	√		
ROUTING OF PIPES AND TUBES	√		
Create Detailed Piping Systems	√		
Create Flexible or Rigid Tubing Lines	√		
Customizable Library of Piping Components	√		

Automatic Assembly of Hangers and Supports	√		
Output Tube Bend Data for Manufacturing	√		
Cut Length Calculations Automated for BOM	√		
Automatic Routing Option for Pipes and Tubes	√		
Minimum Bend Radius Check for Tubes	√		
Output of PCF files for ISOGEN® piping software	√		
ROUTING OF ELECTRICAL CABLING AND WIRING HARNESSSES	√		
Create Detailed Electrical Cable and Wiring Harnesses	√		
Run Rigid or Flexible Electrical Conduit Segments	√		
Conduit	√		
Ribbon Cable	√		
Wire Lengths Automatically Calculated	√		
Automated Harness Flattening for Manufacturing	√		
BOM and Wire Cut Lists	√		
Automatic Routing Using Imported "From-To" Connection Data	√		
Mounting Hardware, Splices, Connectors, Insulation, Looms, Heat-Shrink Tubing, Cable Ties	√		
ROUTING OF RECTANGULAR AND OTHER SECTIONS	√		
ADVANCED SURFACE FLATTENING	√		
ASSEMBLY LEVEL COST ROLL UP	√		