

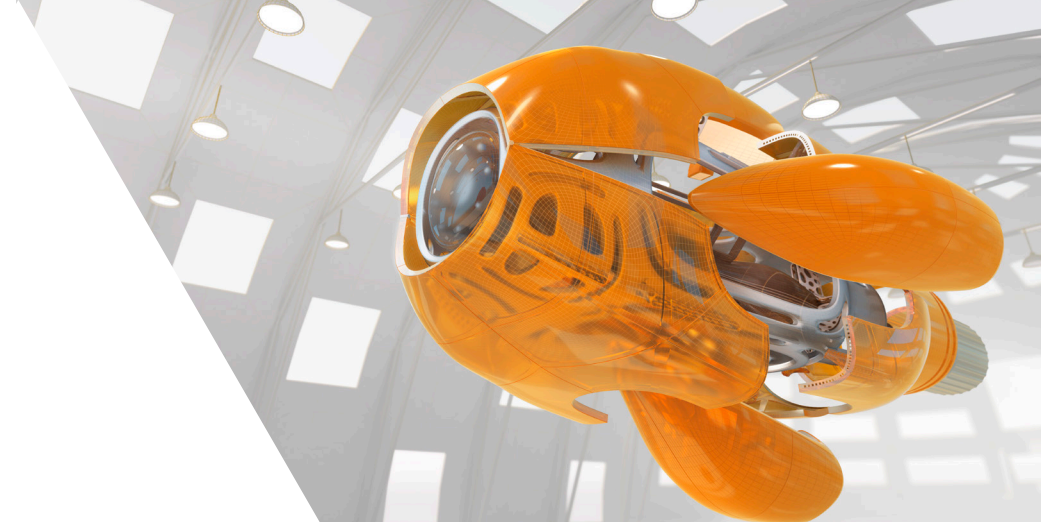


AUTODESK® PRODUCT DESIGN & MANUFACTURING COLLECTION

Workflow Comparison INTERNAL USE ONLY

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The intended use of this document

This comparison has been developed to build awareness about the workflows that have been enabled by PDMC for design and manufacturing. The pricing was gathered using publically available websites and is subject to change. It may not reflect the final pricing provided to the customer.

Why a collection?

Professional-grade design and manufacturing

Design and make your products with the full collection of tools that work inside Inventor, including Nastran In-CAD, HSM, Nesting Utility, and more. You also get the full suite of specialized toolsets available with AutoCAD, along with new cloud-based technology with Fusion 360.

Access the latest and previous releases















Ensure software compatibility with all team members by accessing previous versions when you need them. Stay current with the latest releases. Deploy updates whenever you want.

Easier software and license management

Eliminate the headache of managing multiple product licenses. Get insights on product use. Easily download and install what you want, whenever you like.

Choose access for individuals or teams

Choose between subscriptions that provide single-user access for an individual or permit teams to share licenses with multi-user access.

 Inventor Professional	 Nastran In-CAD	 HSM	 Nesting Utility
 Fusion 360	 AutoCAD	 AutoCAD Mechanical	 AutoCAD Electrical
 Factory Design Utilities	 AutoCAD Architecture	 Navisworks Manage	 ReCap Pro
 3DS Max	 Vault		



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	Product Design & Manufacturing Collection	SolidWorks			PTC Creo Parametric			Solid Edge			
		Standard	Pro	Premium	Essentials	Essentials Plus	Essentials Premium	Design & Drafting	Founda-tion	Classic	Premium
Perpetual (USD)	N/A	\$3,995	\$5,490	\$7,995	N/A	N/A	N/A	\$2,049	\$4,109	\$5,639	\$8,109
Annual Maintenance	N/A	\$1,295	\$1,495	\$1,995	N/A	N/A	N/A	\$459	\$1,339	\$1,539	\$2,189
Yearly Subscription (USD)	\$2,525	available	available	available	\$2,646	\$3,087	\$4,361	\$900	\$2220	\$2760	3940
Monthly Subscription (USD)	\$315	N/A	N/A	N/A	N/A	N/A	N/A	\$100	\$230	\$290	\$420
ENGINEERING DESIGN WORKFLOWS											
3D mechanical design	✓	✓	✓	✓	✓	✓	✓	(limited)	✓	✓	✓
Large assembly design	✓	✓	✓	✓	✓	✓	✓	(limited)	✓	✓	✓
Cloud-based 3D CAD	✓	(add-on)	(add-on)	(add-on)							
Rules-based design/automation	✓	(limited)	(limited)	(limited)	(add-on)	(add-on)	(add-on)	(limited)	(limited)	(limited)	(limited)
Topology Optimization	✓	(add-on)	(add-on)	(add-on)						✓	✓
Electrical engineering	✓	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)				✓
Electrical systems design	✓			✓			✓				✓
Tube and pipe runs	✓			✓			✓				✓
Integrated electrical and mechanical design	✓			(add-on)					(add-on)	(add-on)	(add-on)
Complete mold design tools	✓	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)			(add-on)	(add-on)
Content center /design accelerators	✓										
Sheet metal design	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Frame and weldment design	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Factory design utilities	✓										
VISUALIZATION WORKFLOWS											
Real-time design visualization	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Photorealistic, interactive rendering	✓		✓	✓	(add-on)	(add-on)	(add-on)			✓	✓
Cloud-based rendering	✓										
Professional rendering / animation	✓		✓	✓	(add-on)	(add-on)	(add-on)			(add-on)	(add-on)

(add on) The workflow is available at an additional cost. This document does not differentiate whether the additional software is developed internally or by a third party.

(limited) The technology is available at a basic level. The software does not satisfy most of the requirements of the workflow.

INTERNAL USE ONLY

	Product Design & Manufacturing Collection	SolidWorks			PTC Creo Parametric			Solid Edge			
CONCEPTUAL DESIGN WORKFLOWS		Standard	Pro	Premium	Essentials	Essentials Plus	Essentials Premium	Design & Drafting	Founda-tion	Classic	Premium
T-spline technology	✓										
Parametric surfacing	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
SIMULATION WORKFLOWS											
Dynamic simulation	✓			✓		✓	✓		✓	✓	✓
Assembly level finite element analysis	✓			✓			✓			(limited)	✓
Cloud-based optimization	✓								(add-on)	(add-on)	(add-on)
Point cloud tools	✓			✓	(add-on)	(add-on)	(add-on)			✓	✓
Computational Fluid Dynamics (CFD)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)
Nonlinear finite element analysis	✓	(add-on)	(add-on)	(add-on)							
Fatigue analysis	✓	(add-on)	(add-on)	(add-on)							
Thermal heat transfer analysis	✓	(add-on)	(add-on)	(add-on)							✓
Smart Connected Design (IOT data feed)					(add-on)	(add-on)	(add-on)				
COMMUNICATION WORKFLOWS											
DWG, PDF mark-up	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Multi-CAD data aggregation	✓										
Project level clash management	✓										
Visual fly-throughs and walk-throughs	✓	(limited)	(limited)	(limited)	(limited)	(limited)	(limited)			✓	✓
Mobile and online sharing of 3D designs	✓	(add-on)	(add-on)	(add-on)					(add-on)	(add-on)	(add-on)
BIM interoperability tools	✓	(limited)	(limited)	(limited)	(limited)	(limited)	(limited)				
Native CAD data interoperability	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DOCUMENTATION WORKFLOWS											
Drafting and documentation tools	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Smart panel layout drawings	✓		(add-on)	(add-on)							
Model-based definition	✓	(add-on)	(add-on)	(add-on)	✓	✓	✓	✓	✓	✓	✓
BOM generation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Technical publications		(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)
Inspection documentation		(add-on)	(add-on)	(add-on)							

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DATA MANAGEMENT WORKFLOWS		Standard	Pro	Premium	Essentials	Essentials Plus	Essentials Premium	Design & Drafting	Founda-tion	Classic	Premium
In-product data management	✓		✓	✓		✓	✓	✓	✓	✓	✓
Configurable data security	✓		✓	✓		✓	✓			✓	✓
Multiple user/concurrent design	✓		✓	✓		✓	✓			✓	✓
Automated design organization	✓		✓	✓		✓	✓			✓	✓
Microsoft SharePoint Integration								✓	✓	✓	✓
MANUFACTURING WORKFLOWS											
2.5-axis machining	✓	✓	✓	✓	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)
3-axis machining	✓	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)
5-axis machining	✓	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)
Adaptive clearing	✓										
Turning and mill-turn	✓	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)	(add-on)
Nesting	✓	(add-on)	(add-on)	(add-on)							

INCLUDED PRODUCTS	Product Design & Manufacturing Collection	SolidWorks Premium	PTC Creo Parametric Premium	Solid Edge Premium
3D Solid Modeling	Inventor Professional	SolidWorks	Creo Parametric	Solid Edge
Cloud-based 3D CAD	Fusion 360	-	-	-
Advanced Simulation	Nastran In-CAD	-	-	-
2D CAD	Included	Included	-	-
2D MCAD	Included	-	-	-
2D ECAD	Included	-	-	-
Industrial Design	Alias Design	-	Creo Parametric ISDX	-
Layout	Navisworks Manage	-	-	-
Advanced Rendering	3ds Max Design	-	-	-
Design Review / Visualization	Navisworks Manage	Photoview 360	-	Lightworks
Reality Capture	ReCap Pro	-	-	-
Data Management	Vault Basic	SolidWorks PDM Standard	Windchill PDMLink	Insight
CNC Machining	Inventor HSM	SolidWorks CAM Standard	-	-

Information is based on a review of features performed by Autodesk personnel, December 2017 through April 2018.

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