



CREO DESIGN ADVANCED



design the way it should be



The Creo Design Advanced package builds on Creo Design Essentials. Turn to Creo Design Advanced when you want industry-leading capabilities in concurrent design and development, and in prismatic machining. Each Creo package offers more capabilities in every seat right out of the box. That's design the way it should be.



CORE 3D CAD



The most robust set of 3D CAD capabilities:

- 3D Part & Assembly Design
- Automatic 2D Drawing Creation
- Parametric & Freestyle Surfacing
- Assembly Management & Performance
- Sheet Metal Design
- Mechanism Design
- Plastic Part Design
- Direct Modeling (Flexible Modeling)
- Additive Manufacturing
- Augmented Reality

ADDITIONAL CAPABILITIES >>>



Multi-CAD Collaboration

Seamlessly integrate and work with data from SolidWorks and Autodesk Inventor:

- Collaboration for SolidWorks (Open, Update and Save As native SolidWorks files)
- Collaboration for Autodesk Inventor (automatically detect and update Inventor data)



Piping & Cabling Design

Create and optimize routings for cost, manufacturability and service:

- Automated routing referencing 2D Schematic logic
- Easily visualize and edit using drag handles and on-the-fly editing
- Ability to compare/validate 3D data against 2D schematic logic



Rendering (powered by Luxion's Keyshot)

Produce photorealistic images for design review, marketing collateral, and product packaging:

- Real-time Raytracing powered by Luxion Keyshot
- Enhanced lighting with High Dynamic Range Image (HDRI) support
- Standard library of over 200 predefined materials types



Design Exploration

Rapidly create and explore concepts and modeling alternatives:

- Explore design changes safely without risking original designs or committing to any change
- Simultaneously develop different ideas and evaluate all options before making decisions
- Eliminate manual data duplication and session clean-up for loading and reloading different versions



Fastener Design

Automate fastener geometry creation and hardware assembly:

- Automate the creation of holes and assembly fasteners
- Access to standard libraries (ANSI, DIN, JIS)



Advanced Framework Design

Speed design and improve the accuracy of structural framework assemblies:

- Fully integrated modeling, framework design and analysis
- Comprehensive and customizable libraries of profiles, joints, connections and equipment
- Automated beam placement and creation of framework geometry (e.g., joints, connections)



Legacy Data Migration

Support legacy data migration and CAD consolidation efforts:

- Legacy Drawing Associator (LDA) – automatically connects parametric models to imported legacy data
- Relink model and drawing to provide associativity (update) and association when checked into Windchill PDMLink
- Annotation Converter (AC) – Automatically convert drawing dimensions and notes to 3D annotations



PTC Mathcad

Perform, analyze, and share your most vital calculations:

- Conduct complex engineering calculations to validate your designs
- Comprehensive unit support for numeric and symbolic calculations, functions, solve blocks, tables, vectors/matrices, and plots
- Lock content to prevent viewing and hide proprietary information



Human Factors Design

Validate and optimize products for human interaction:

- Quickly insert and customize digital human models to prevent ergonomic mismatches and reduce prototype costs
- Easily manipulate manikins
- Visualize human reach and vision



Core Simulation Capabilities

Enhance your product design with Simulation & Analysis:

- Static Structural Analysis
- Simulate Parts and Assemblies
- Simulate Solid, Beams, Shells, Masses, Springs



Advanced Assembly

Facilitate and support your concurrent design and development:

- Data Sharing and Distribution
- Reference Control
- Change Propagation



Prismatic and Multi-Surface Milling

Achieve the highest quality, highest precision machining in the fastest time possible:

- Multi-Surface 3-axis milling with 4- and 5-axis positioning
- High speed machining (for rapid prototyping and manufacturing)
- Automatic change propagation and associative update of NC toolpaths

BENEFITS OF SUBSCRIPTION

(Included in every Creo Design Package):

STANDARD ELEARNING LIBRARY:

Stop searching for answers. Over 140 hours of training are now at your fingertips.

EXTENDED LICENSE BORROWING:

Working remotely just got easier. Borrow floating licenses for up to 180 days - 150 days more than perpetual.

HOME USE LICENSE:

Leave the laptop at work. Every package now includes a home use license of your Creo Design package.

PERFORMANCE ADVISOR:

The Creo Performance Advisor provides a dashboard for your entire Creo installation, allowing you to understand and optimize the performance of your entire Creo environment.

>>> THE CREO ADVANTAGE

Creo is the 3D CAD solution that helps you accelerate product innovation so you can build better products faster. Easy-to-learn Creo seamlessly takes you from the earliest phases of product design to manufacturing and beyond. You can combine powerful, proven functionality with new technologies such as generative design, augmented reality, real-time simulation, additive manufacturing and the IoT, to iterate faster, reduce costs and improve product quality. The world of product development moves quickly, and only Creo delivers the transformative tools you need to build competitive advantage and gain market share.



Please visit the [PTC support page](#) for the most up-to-date platform support and system requirements.

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