



# CREO DESIGN ADVANCED PLUS



design the way it should be



You deserve more in your 3D CAD package. Welcome to the new industry standard, with more capabilities in every seat out of the box. With Creo Design Advanced Plus, you'll enjoy all the benefits of the Creo Design Advanced package as well as additional capabilities such as additive manufacturing, surface design, geometric dimensioning and tolerancing, and CAM.



# CORE 3D CAD



## The most robust set of 3D CAD capabilities:

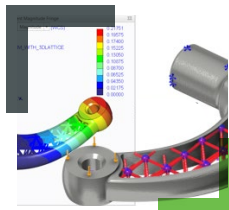
- 3D Part & Assembly Design
- Automatic 2D Drawing Creation
- Parametric & Freestyle Surfacing
- Assembly Management & Performance
- Sheet Metal Design
- Mechanism Design
- Plastic Part Design
- Direct Modeling (Flexible Modeling)
- Additive Manufacturing
- Augmented Reality



## Creo Design Advanced Plus includes all the capabilities of Creo Design Advanced.

- Multi-CAD collaboration
- Piping & Cabling Design
- Rendering (powered by Luxion's Keyshot)
- Design Exploration
- Fastener Design
- Advanced Framework Design
- Legacy Data Migration
- Human Factors Design
- Core Simulation Capabilities
- Advanced Assembly
- Prismatic and Multi-Surface Milling
- PTC Mathcad

### ADDITIONAL CAPABILITIES >>>



#### Additive Manufacturing

Create and optimize lattice structures and define printer tray setup:

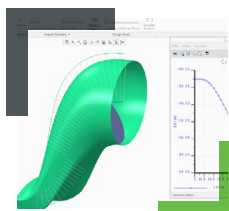
- Automated creation of 2.5D and 3D lattice structures
- Seamless analysis and optimization of lattice
- Printer tray setup and nesting optimization



#### Interactive Surface Design

Combine the power of parametric modeling and flexibility of freeform surfacing:

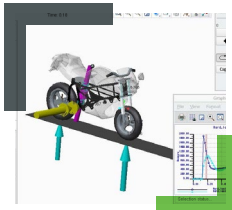
- Combined freeform and technical surfacing in a single environment
- Focus on design aesthetics and shape rather than constraints and parameters
- Design precise curves and surfaces to achieve highly-engineered, manufacturable products



#### Behavioral Modeling

Optimize geometry to solve for design goals and engineering criteria:

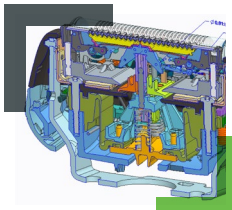
- Automatically solve for design goals
- Create smart models that adapt to change
- Define and track custom measures



### Mechanism Dynamics

Analyze and optimize the dynamic performance of mechanism designs:

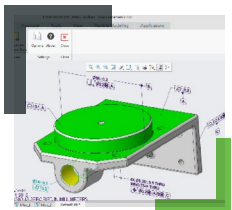
- Model real-world force, loads and contact types
- Analyze mechanism behavior and reactionary forces
- Seamlessly transfer reaction, gravity and inertial loads to Creo Simulate (Structural Analysis)



### Tolerance Analysis

Analyze and understand geometric tolerance stack-up and dimensional variation:

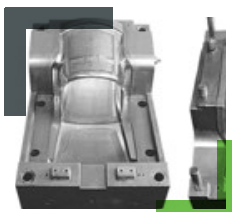
- Evaluate the impact of tolerances on the manufacturability of designs
- Identify critical dimensions that contribute to the measure variation
- Automatically generate HTML reports



### GD&T Advisor

Simplify GD&T creation and improve MBD compliance with latest standards (ASME & ISO):

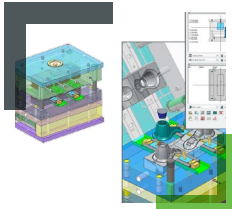
- Wizard-like dashboard to guide the user in the correct application of GD&T
- Feature-centric view of GD&T
- Advisor Tree – displays messages to inform and guide the user



### Tool Design

Accelerate the design of high-quality production mold and cast tooling:

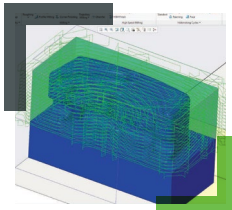
- Easy to use process driven UI for Mold and Cast design
- Automated creation of parting line and parting surface geometry
- Associative design and tooling updates



### Expert Moldbase

*Automate manual, time-consuming tasks to speed the creation of moldbase tooling:*

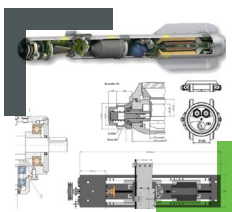
- 2D process-driven workflow for moldbase design and detailing
- Customizable “smart” mold component library
- Automatic ejector pin, waterline, and fittings functions, automatic runners and waterline checks



### High Speed Milling Plus

*Dedicated machining extension to produce 5 axis simultaneous toolpaths for production parts and mold/die/cast parts:*

- 3 and 5 Axis Trajectory Milling
- Comprehensive holmaking
- High speed 3 and 5-axis Milling powered by ModuleWorks



### Creo Layout

*Maximize productivity using integral 2D layout and 3D detailed design:*

- Easily create from scratch or edit existing information
- Directly utilize 2D data to speed the creation of 3D design
- Implement changes driven from 2D layout information

# 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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