Top Enhancements Creo® Parametric™ 5.0

Creo 5.0 makes your job easier with key productivity enhancements for the fast-changing world of product design and manufacturing. When you're ready, Creo offers both new and expanded capabilities in Additive Manufacturing, Mold Machining, Topology Optimization, Computational Fluid Dynamics, and multi-CAD collaboration. It's design as it should be.
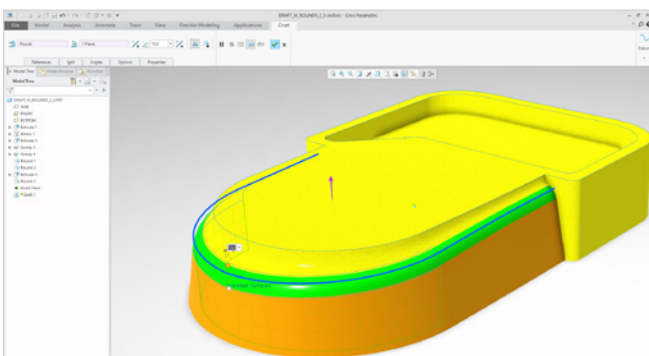
Enhanced User Interface and Experience

Creo 5.0 brings you an enhanced interface in the form of improved selection and appearance draggers and a smooth text display. Additionally, there's an expanded mini-toolbar, along with integrated search functions in the model tree so you can find and perform actions on components or features more easily. The model check reporting tool also has a modernized look and feel.
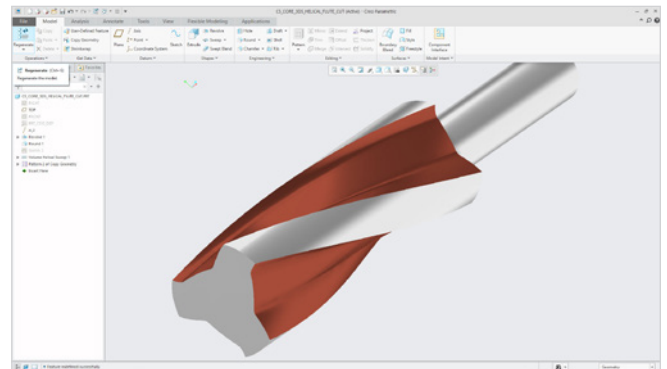
Modeling Enhancements

Draft Features

Enjoy increased productivity through the faster, easier application of draft features to geometry (both native and non-native) containing rounds. After you identify the surface to which you want to apply a draft, Creo will remove the rounds, apply the draft, and reattach the rounds automatically.

Apply draft to surfaces with adjacent rounds or chamfers. This example uses a round chain as the hinge.
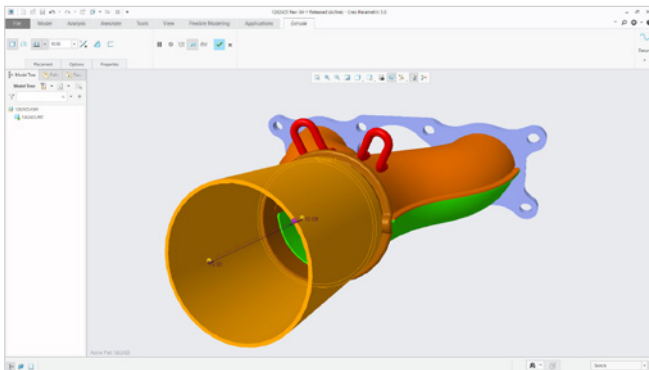
Helical Sweep Tool

Now you can create accurate 3D geometry of parts machined with cutting tools, instead of relying on inaccurate 2D swept approximations. The helical sweep tool will allow you to specify a revolve profile and helical trajectory to sweep along, resulting in accurate geometry of both milling and grinding wheel operations.

Volume helical sweep – calculate accurate geometry for a Grinding Wheel Scenario.
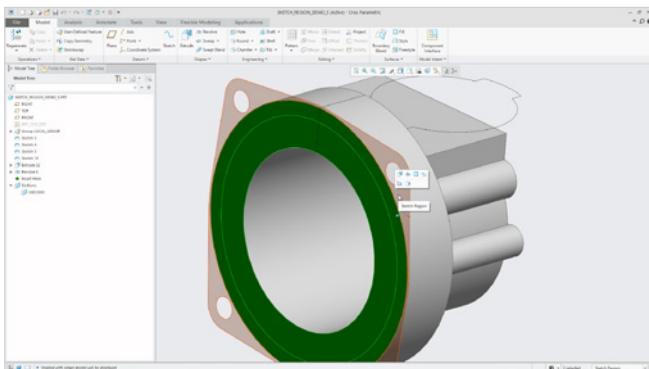
Design in Perspective

With Creo 5.0, you can look at your model in perspective mode instead of orthographic. Easily toggle back and forth between display modes for improved productivity and an enhanced user experience.

Create features or modify your design while remaining in perspective mode.
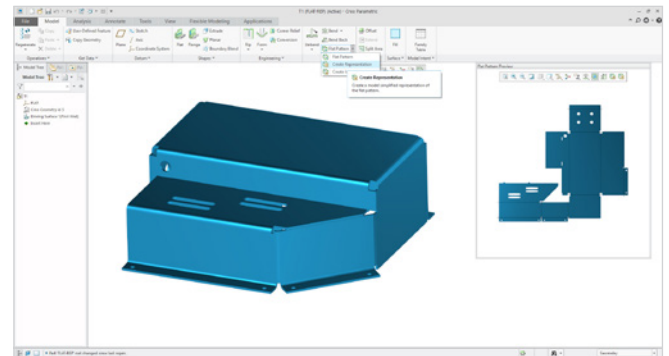
Sketch Regions

Creo 5.0 gives you the ability to build sketch regions. Sketch regions enable you to create more complex geometry with fewer clicks. Begin by creating a single sketch with intersecting overlapping geometries, then highlight and select multiple closed regions to extrude or revolve.

Sketch Region support in object/action workflows.
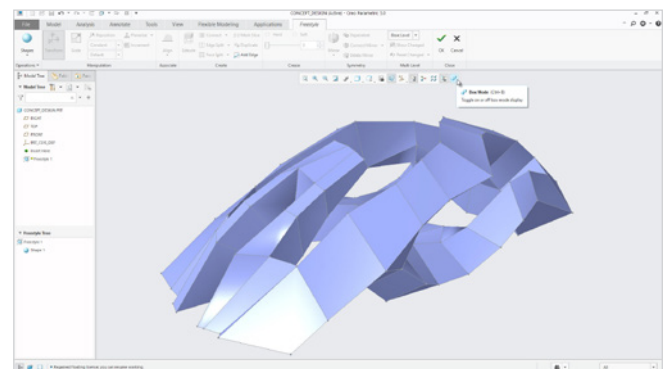
Sheetmetal

Creo's sheetmetal capabilities continue to evolve. We've introduced two corner relief types with explicit control over orientation, which makes you more efficient. And you can use a flat state representation of your component and have it stored as part of the design model. Now you have the ability to switch between bent and flat state in either an assembly or in a drawing.

Sheetmetal – Flatten Representation of sheetmetal parts.

Subdivisional Modeling

We've also expanded our freestyle subdivisional modeling capabilities in two important ways. You can now align your geometry to existing Creo geometry with curvature constraints. The new box mode enables clearer understanding of your control mesh and faster interactive manipulation of your design.

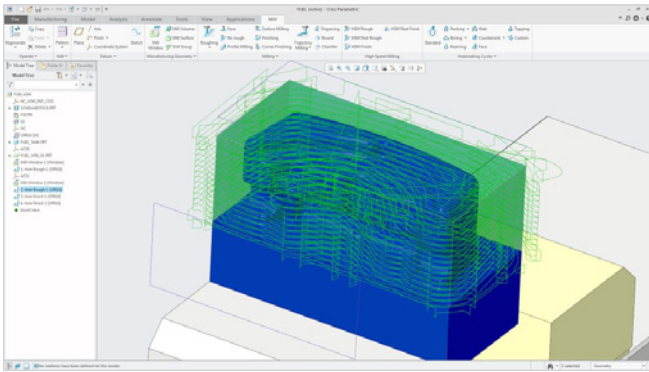Use box mode to gain a clearer understanding of shapes and enable faster manipulation.

When you're ready, Creo 5.0 offers exciting capabilities to keep you on the forefront of product design.

Creo Additive Manufacturing Plus Extension for Materialise

Whether you're printing with polymers or metal, Creo 5.0 has you covered, with support for Stratasys and 3D Systems plastic printers and the library of Materialise printers. Additionally, you can generate and customize the support structures needed for metal printing.
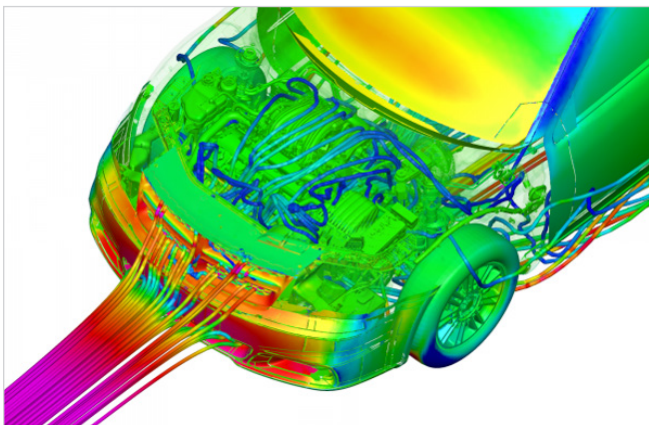
Creo Mold Machining Extension

This extension generates optimized high-speed machining tool paths specific for one-off and low-volume production runs.

High-speed machining roughing sequence, multi-threaded for fast computation.

Creo Flow Analysis Extension
(Base, Plus, and Premium)

Creo brings the power of computational fluid dynamics to product designers. Now you can easily analyze liquid and gas flow early and often in your design process. Premium capabilities available for analysts.

Easy-to-use CFD solution for every design engineer.

Creo Collaboration Extension for
Autodesk Inventor

Easily open files from Autodesk Inventor inside Creo and, with the additional collaboration extension, receive automatic updates.

Creo Topology Optimization Extension

Creo automatically will create optimized forms/shapes based on input conditions and defined criteria. You can create solid geometry using topology optimization without leaving Creo.

The Creo Advantage

Creo is a 3D CAD solution that helps you build better products faster by accelerating product innovation, reusing the very best of your designs and replacing assumptions with facts. Go from the earliest phases of product design to a smart, connected product with Creo. Add augmented reality to allow everyone to visualize your design. In the fast changing world of the Industrial IoT, no other company can get you to the substantial value as quickly and effectively as PTC.