

Pro/ENGINEER® Advanced XE

EXTENDED 3D CAD POWER PLUS DATA MANAGEMENT

Improve your productivity with solutions that meet your needs. The Pro/ENGINEER Advanced XE (Extended Edition) Package provides the power of Pro/ENGINEER—the industry's only Integrated 3D CAD/CAM/CAE solution—with data management capabilities and your choice of one of our most popular high-performance add-on modules.

This powerful package provides your product development team with the essential design engineering and data management solutions you need to accelerate your product development activities. Now you can quickly and affordably add the precise tools to speed development cycles, respond faster to changing requirements, improve communication, and lower costs.

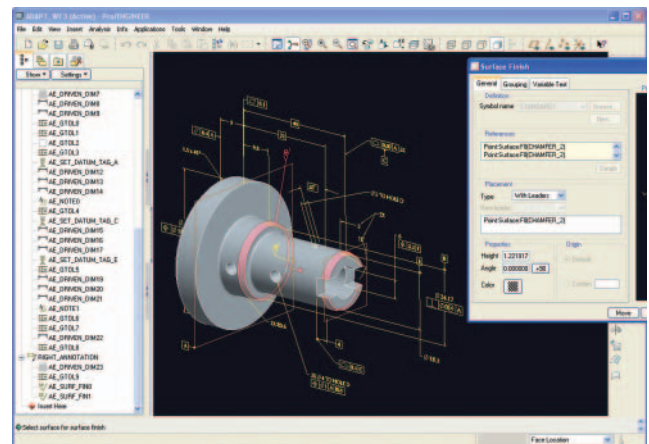
Leverage the Most Powerful 3D CAD Solution

Create high fidelity, geometrically complete digital product models using the advanced 3D CAD capabilities of Pro/ENGINEER. The industry leading associativity of Pro/ENGINEER ensures that all changes made to your 3D model are automatically updated in all downstream deliverables. With the ability to perform so many varied design tasks from within a single, fully integrated application, you now have the ultimate solution for product design.

Tailor your CAD System

Build your CAD solution by selecting the performance option best suited to your company's individual needs. Choose one of the following add-on modules:

- Pro/ENGINEER Advanced Assembly
- Pro/ENGINEER Behavioral Modeling
- Pro/ENGINEER Interactive Surface Design
- Pro/ENGINEER Mechanism Dynamics
- Pro/ENGINEER Piping and Cabling



Communicate your design intent using powerful surface highlighting and 3D annotation capabilities in Pro/ENGINEER.

Add Powerful Data Management Capabilities

Enable your organization to access and control Pro/ENGINEER data and other product information from a variety of sources anytime, anywhere. This extension offers the flexibility to select the optimal solution for Pro/ENGINEER workgroup data management or, as your needs expand, comprehensive, heterogeneous MCAD/ECAD/Software Source Code/text data management and process control capabilities. Choose one of the following data management options:

- Windchill PDMLink®—Delivering Pro/ENGINEER workgroup data management as part of a broader data management solution
- Pro/INTRALINK®—focused solely on Pro/ENGINEER workgroup data management

Key Benefits

- Quickly create the most innovative and highest quality products
- Improve time-to-market by compressing the design cycle
- Increase collaboration across your design team, while facilitating concurrent engineering
- Save countless hours of work using fully integrated modules—you never waste time translating data for analysis, and you can quickly and easily create and modify aesthetic surfaces in the same context of your Pro/ENGINEER parametric model.

Pro/ENGINEER Advanced XE

High-Performance Add-On Module

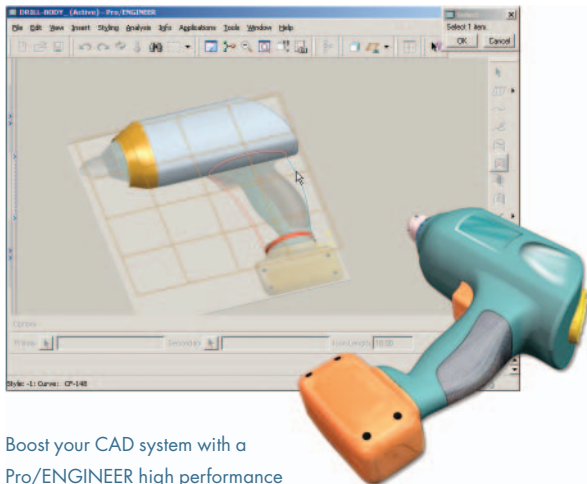
Depending on the optional module that you select, you can realize these additional benefits:

- Pro/ENGINEER Advanced Assembly: Improve the management of complex assembly design across a collaborative team, using more efficient top-down design methodologies, and enhancing communication of assembly process plans and instructions.
- Pro/ENGINEER Behavioral Modeling: Reduce costs and increase performance by optimizing product design, and by considering multiple design objectives.
- Pro/ENGINEER Interactive Surface Design: Gain a competitive advantage by improving your product's aesthetic appeal by creating a sleek, eye-catching look.
- Pro/ENGINEER Mechanism Dynamics: Reduce warranty costs by conducting more extensive virtual tests of motion behavior than are possible with physical testing.
- Pro/ENGINEER Piping and Cabling: Save costs and compress the development cycle by replacing physical prototypes for routing electrical and mechanical systems (pipes and cables) with virtual prototypes.

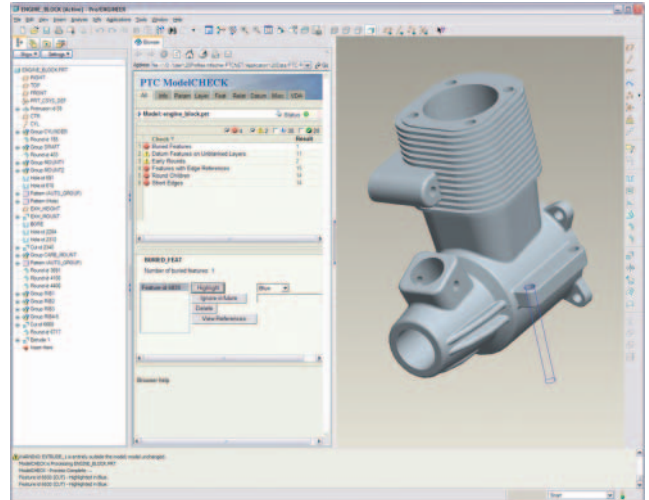
Data Management—Pro/INTRALINK or Windchill PDMLink

Share and manage design data more efficiently throughout the product lifecycle using a single, secure Web-based data repository.

- Windchill PDMLink: Improve product development productivity with Pro/ENGINEER data management and broader content and process management capabilities
- Pro/INTRALINK: Manage concurrent design teams and the powerful data associativity of Pro/ENGINEER



Boost your CAD system with a Pro/ENGINEER high performance add-on module.



Use ModelCHECK to address your quality challenges by monitoring, educating, and deploying company standards and best practices.

Features & Specifications

Powerful 3D CAD Capabilities

- Create precise geometry, regardless of model complexity
- Create standards compliant 2D and 3D drawings
- Automatically generate associative BOM and balloon notes
- Develop complex surface geometry using sweeps, blends, extends, offsets and a variety of other features
- Dynamically scale, bend, twist models with the revolutionary Warp technology of Pro/ENGINEER
- Utilize broad range of sheetmetal, weld, and assembly modeling capabilities
- Quickly create a mechanism assembly and analyze motion of parts
- Leverage broad support for data interoperability and imported data repair
- Use ModelCHECK to enforce best practices and ensure compliance to company and industry design standards
- Create accurate, photo-realistic images with real-time photo-rendering
- Seamlessly connect to resources with integrated Web capabilities
- Access predefined parts using the complete library of parts, features, tools, and more

Add Data management and High-Performance Module

High-Performance Add-On Modules

Tailor your CAD solution with one of the following performance modules:

Pro/ENGINEER Advanced Assembly

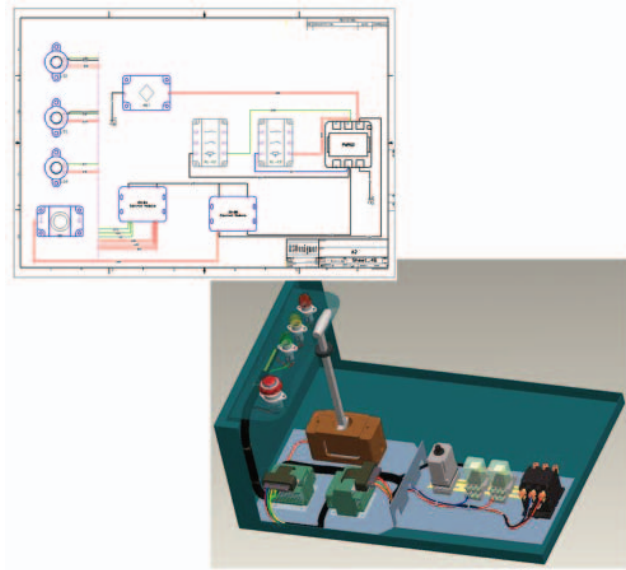
- Share and manage assembly design data more efficiently using predefined skeleton model interfaces
- Define and automate the enforcement of design rules, so that only appropriate relationships are created within the context of the design, making design modifications and reuse easy
- Develop unique sequence steps to provide models, views, and separate BOM listings for each step of the assembly process

Pro/ENGINEER Behavioral Modeling

- Assess model sensitivity to understand the effects of change on design objectives
- Automatically generate a set of feasible solutions for multi-objective design problems
- Integrate your results with Pro/ENGINEER simulation software or other external applications

Pro/ENGINEER Interactive Surface Design

- Use 2D concept sketches as a “rough” visual reference in the creation of a 3D model. Start conceptually by developing geometry either from scratch, from a sketch, scan sets or other reference data, then gradually develop the concept into a production model
- Work with a unique, four-quadrant modeling window that supports the direct creation, manipulation, and control of curves, surfaces, and connections
- Build, then modify complex surfaces by simply dragging curve control points, while maintaining G2 continuity



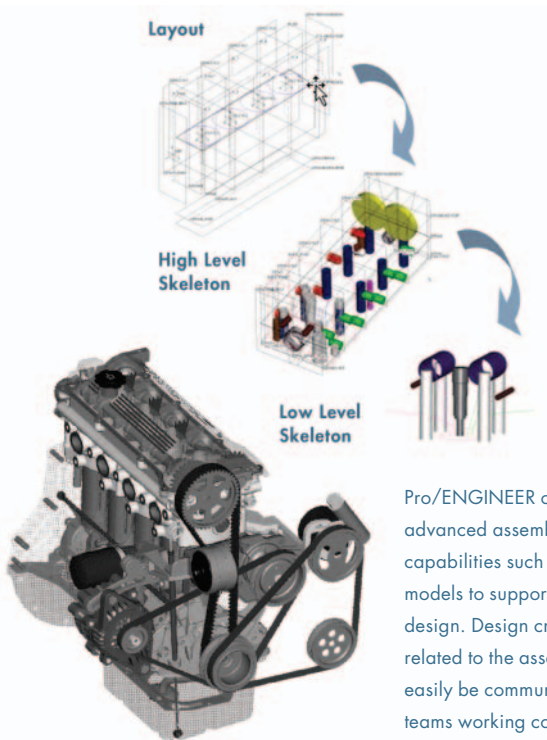
Pro/ENGINEER offers comprehensive capabilities for creating wires and cables in 3D CAD models, including automated routing from XML, NWF or Mentor data.

Pro/ENGINEER Mechanism Dynamics

- Obtain accurate data of dynamic spring, cam, damping, or impact analysis by incorporating the actual inertial masses of components and the forces acting on and between them
- Animate mechanisms in action and see how dynamic forces, acceleration, and velocity affect the digital product model using color-coded vector arrows
- Perform various types of analyses including: static/steady state, to find final resting place; dynamic, to compute force vs. time; and force balance, to find the force required to maintain a desired mechanism configuration

Pro/ENGINEER Piping and Cabling (Includes Pro/ENGINEER Piping and Cabling Design and Pro/ENGINEER Routed Systems Designer LITE)

- Produce all cabling and piping 2D and 3D diagramming in a single solution
- Calculate mass properties, and automatically generate customizable BOMs, wire lists, and flattened harnesses
- Evaluate pipelines for manufacturability and interference



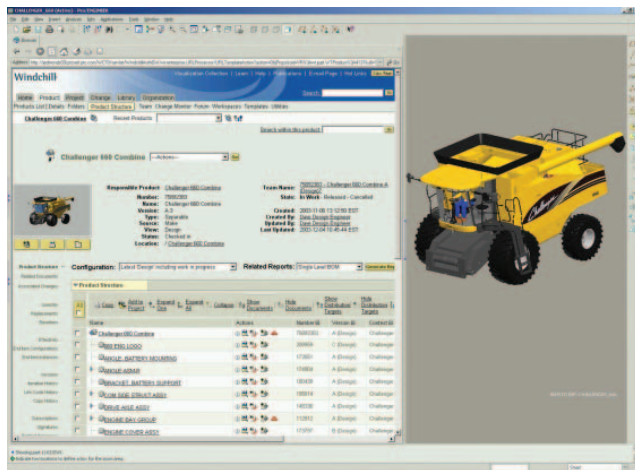
Pro/ENGINEER offers advanced assembly capabilities such as skeleton models to support top-down design. Design criteria related to the assembly can easily be communicated to teams working concurrently on designs.

Data Management Options

Choose the right data management option that best fits your needs.

Windchill® PDMLink

- Create a single, secure, Web-based source for Pro/ENGINEER data and other product information for the entire enterprise, with vaulting, revisioning, configuration management, search, and lifecycle management
- Embedded visualization for viewing and marking up Pro/ENGINEER parts and assemblies, in multiple CAD formats and PDFs
- Robust data management for Pro/ENGINEER data and Arbortext authored content, as well as other engineering documents
- Optional data management capabilities for multiple mechanical and electrical CAD tools and software source code, and documents
- Out-of-the-box change management support for both full-track and fast-track changes
- Configuration management of product information over the life of the product
- Robust integration with ERP and other business systems, with optional Windchill Enterprise Systems Integration (ESI) module
- Flexible deployment options for on-premise and On Demand hosted solutions



Product Data Management with Windchill PDMLink embedded in Pro/ENGINEER.

Pro/INTRALINK

- Provides rich, mature, and reliable Pro/ENGINEER data management on a modern Windchill architecture
- Supports concurrent engineering
- Provides vaulting tools (check-in, check-out, baselines) and reporting tools
- Offers continued support for multi-site deployments with Pro/INTRALINK replication tools
- As a subset of Windchill PDMLink, provides a growth path to more comprehensive data management and process control capabilities

Platform Support and System Requirements

For more information and system requirements, visit:

<http://www.ptc.com/partners/hardware/current/support.htm>

The Right Solution – Without Compromise

Pro/ENGINEER is simple to learn and use, and is available in a variety of packages designed to meet your company's specific needs. Whether you need a cost-effective 3D CAD system that contains all the basic design capabilities or a comprehensive Product Development System that seamlessly connects your extended supply chain, you'll find exactly what you need in a single, fully scalable solution. Choose the package that fits your needs today. As your needs change and grow, you can easily upgrade to the package that is right for you tomorrow which leverages the same powerful platform-this means no data translation and a consistent user experience.

The Pro/ENGINEER Advantage

The Pro/ENGINEER family of integrated 3D CAD/CAM/CAE solutions delivers a distinct advantage for engineers and designers because Pro/ENGINEER is fully associative. That means any change made to the design is automatically reflected in all downstream deliverables – without any translation of model information. By eliminating data translation, you not only save time, but you also avoid the possibility of translation errors in your design. Pro/ENGINEER packages are the first choice of engineers and designers because no other product development package offers more power and speed in one scalable platform.

For more information about the Pro/ENGINEER Advanced XE Package, please visit: www.PTC.com/go/proengineerpackages

Copyright © 2007, Parametric Technology Corporation (PTC) – All rights reserved under copyright laws of the United States and other countries. PTC, the PTC Logo, Pro/ENGINEER, Wildfire, Windchill, Windchill PDMLink, Pro/INTRALINK, and all PTC product names and logos are trademarks or registered trademarks of PTC and/or its subsidiaries in the United States and in other countries. Windows is a registered trademark of Microsoft Corporation.