PTC delivers the broadest range of powerful product development packages on the market today. No matter which package you choose, you’ll get the industry’s fastest, most comprehensive tools: easy to use, competitively priced, and always upgradeable—to seamlessly meet the varied demands of your business.

The Complete Set of CAD Solutions—On a Single, Integrated Platform

Product design firms and manufacturing companies are under constant pressure to develop more products in less time, without sacrificing innovation or quality. Pro/ENGINEER integrated CAD/CAM/CAE solutions are the world standard—providing you with everything you need to achieve the highest quality design in the fastest possible time. The unlimited scalability of Pro/ENGINEER also allows you to add new users and expand capabilities with new modules as your needs grow. And, since Pro/ENGINEER is an integral part of PTC’s Product Development System, your 3D CAD solution will seamlessly connect to PTC’s industry leading solutions, including Windchill® for content and process management; ProductView™ for advanced mock-up and interactive visualization; Mathcad® for engineering calculations; and Arbortext® for dynamic publishing.

Each Pro/ENGINEER package provides a powerful, easily scalable set of capabilities.
**Pro/ENGINEER Packages**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The essential 3D CAD value package is powerful, easy to use, and fully scalable. This package features the industry’s broadest range of core modeling and design capabilities for creating high quality designs in less time. Capabilities of the package include:</td>
<td>The best 3D CAD design tools combined with an easy-to-deploy, hosted data management solution. Specifically tailored to meet the needs of companies that need to speed development cycles, Pro/ENGINEER Advanced SE helps you respond faster to changing requirements, share product information, and lower costs. The package includes:</td>
<td>Designed for engineers who need more design power and more efficient design processes. The package includes:</td>
</tr>
<tr>
<td>• Comprehensive 3D Solid Modeling</td>
<td>• Pro/ENGINEER Foundation XE, giving you powerful 3D CAD capabilities to create the highest quality designs</td>
<td>• Pro/ENGINEER Foundation XE package 3D CAD capabilities</td>
</tr>
<tr>
<td>• Detailed Documentation: 2D and 3D Drawings</td>
<td>• Windchill® PDMLink™, providing robust and comprehensive data management. IBM On Demand hosting included.</td>
<td>• Choice of data management option:</td>
</tr>
<tr>
<td>• Technical Surfacing</td>
<td>• PTC University Web-based Training, delivering instant access to online training for managing Pro/ENGINEER data in Windchill</td>
<td>– Pro/ENGINEER Advanced Assembly</td>
</tr>
<tr>
<td>• Assembly Modeling</td>
<td></td>
<td>– Pro/ENGINEER Behavioral Modeling</td>
</tr>
<tr>
<td>• Weld Modeling and Documentation</td>
<td></td>
<td>– Pro/ENGINEER Interactive Surface Design</td>
</tr>
<tr>
<td>• Mechanism Design and Design Animation</td>
<td></td>
<td>– Pro/ENGINEER Mechanism Dynamics</td>
</tr>
<tr>
<td>• ModelCHECK™—Design Validation Tool</td>
<td></td>
<td>– Pro/ENGINEER Piping and Cabling</td>
</tr>
<tr>
<td>• Data Interoperability and Import Data Repair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Integrated Web Capabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Complete Library of Parts, Features, Tools and More</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Pro/ENGINEER design validation capabilities in ModelCHECK address your quality challenges by monitoring, enforcing, and deploying company standards and best practices.

Access Windchill PDMLink data management capabilities directly from the Pro/ENGINEER user interface.

Pro/ENGINEER Advanced Assembly Extension offers capabilities such as skeleton models to support top-down design.

**Package Overview**

The Pro/ENGINEER design validation capabilities in ModelCHECK address your quality challenges by monitoring, enforcing, and deploying company standards and best practices.

**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 data translation required. So you not only save time, but you also avoid the possibility of translation errors in your design. Pro/ENGINEER is also an integral part of PTC’s Product Development System (PDS). You can seamlessly expand your PDS solution by adding Mathcad, Windchill, ProductView, or Arbortext solutions, and gain easy access to information and people through the Web user interface. No other product development package offers more power and speed in a single, fully scalable platform.

**A Solution for Your Role in Product Design**

In addition to the products contained in these Pro/ENGINEER packages, PTC offers additional precision tools that extend the power of Pro/ENGINEER, including:

- **Pro/ENGINEER Manufacturing Solutions** offer powerful tools for machining, prismatic and multi-surface milling, tool design, moldbase design, NC sheetmetal, computer-aided verification of machined parts, plastic-filling process simulations, and more
- **Pro/ENGINEER Advanced Mechanica** for extended simulation and analysis such as advanced material and non-linear behaviors
Pro/ENGINEER Enterprise SE
A complete product development solution that's optimized to solve the complex needs of today's globally dispersed development teams. Pro/ENGINEER Enterprise SE enables teams to work concurrently, share information efficiently, promote design re-use, and leverage an automated change process that ensures integrity and traceability of designs. The package includes:

- All solutions in the Pro/ENGINEER Advanced XE package
- All five high-performance modules offered as options in the Pro/ENGINEER Advanced XE Package:
  - Pro/ENGINEER Advanced Assembly
  - Pro/ENGINEER Behavioral Modeling
  - Pro/ENGINEER Interactive Surface Design
  - Pro/ENGINEER Mechanism Dynamics
  - Pro/ENGINEER Piping and Cabling
- Windchill ProjectLink™ – Web-based collaboration and project management capabilities

Pro/ENGINEER Enterprise XE
The industry’s most comprehensive product development package, designed to broaden and drive engineering process optimization both upstream and downstream. Improve technical publishing, as well as engineering processes such as concept development, system design, detailed design, variant design and generation, verification and validation, and design outsourcing. The package includes:

- All solutions in the Pro/ENGINEER Enterprise SE package
- Mathcad® solves and documents engineering calculations
- Pro/ENGINEER Mechanica® performs key simulation and analysis tasks
- ProductView Standard – provides advanced mock-up and visualization
- Arbortext Editor™ – enables a component-based approach to authoring/editing technical publications and leveraging rich Pro/ENGINEER models
- PTC University Web-based Training – Provides access to more than 75 hours of training for Mathcad, Pro/ENGINEER Mechanica, ProductView, and Arbortext Editor

Access Windchill ProjectLink collaboration and project management capabilities directly from the Pro/ENGINEER user interface.

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 (Pro/ENGINEER Foundation XE); or 3D CAD, data management and extended capabilities such as advanced assembly or piping and cabling design (Pro/ENGINEER Advanced XE); or the most comprehensive Product Development System (Pro/ENGINEER Enterprise XE) that seamlessly connects your team and extended supply chain, you’ll find exactly what you need in one of the packages in the chart on the following page.
## Pro/ENGINEER Packages

### 3D Detail Design/Part Modeling
- Design validation with PTC’s ModelCHECK
- Solid, sheetmetal, and weld modeling
- Support for 3D drawings and annotations per new ASME Y14.41 standard
- 3D cabling and piping design

<table>
<thead>
<tr>
<th>Pro/ENGINEER Foundation XE</th>
<th>Pro/ENGINEER Advanced SE</th>
<th>Pro/ENGINEER Advanced XE</th>
<th>Pro/ENGINEER Enterprise XE</th>
</tr>
</thead>
<tbody>
<tr>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○</td>
</tr>
</tbody>
</table>

### Surfacing
- Advanced parametric surfacing
- Global modeling and warp surface modification
- Interactive surface design for creating complex surfaces, G2 continuity

### Assembly Modeling
- Embed form, fit, and function knowledge with AssemblySense™
- Flexible models; single BOM entry for multiple geometry states
- Simplified representations and Shrinkwrap™, which protects intellectual property and reduces file size
- Advanced assembly with top-down design, process planning, design for manufacturability, and 2D associative process sheets

### Interoperability and Data Exchange
- Incorporation of Web services for native Web connectivity
- Imported data repair
- Multi-platform support including Windows/Solaris/HP-UX
- Support for all major standards such as STEP/IGES/DXF/STL/VRML, AutoCAD DWG, DXF (import of 3D with associated 2D), ACIS import/export, Parasolid import/export*

### Simulation
- Real-time photorealism
- Design animation with movies, motion envelopes, and interference checking
- Mechanism kinematics design with click-and-drag animation
- Mechanism dynamics simulation of force, velocity, acceleration, torque
- Advanced behavioral modeling for product design and optimization
- Structural and thermal simulation

### Collaboration and Project Management
- A secure project workspace for collaboration with global team members
- Project management and execution that controls action items, milestones, and deliverables

### Digital Product Data Management and Process Control
- Pro/ENGINEER CAD data management
- Broad enterprise product data management **
- Automated change management process**
- Configuration management **

### Engineering Process Standardization and Optimization
- XML text authoring (Arbortext Editor)
- Engineering calculations (Mathcad)
- Extended visualization capabilities (ProductView Standard)
- PTC University Training on Arbortext, Mathcad, ProductView, and Pro/ENGINEER Mechanica

* Support for import and export of CATIA V4, CATIA V5 and UG, including PTC’s patented Associative Topology Bus™; compatibility and support for IDEAS import can be purchased separately.

** Available only with Windchill PDMLink. Data management support for other MCAD/ECAD data can be purchased separately.

- ● Included in package.
- ○ Package option.

For more detailed information about the Pro/ENGINEER Packages, please visit [www.PTC.com/go/proengineerpackages](http://www.PTC.com/go/proengineerpackages)

© 2007, PTC (Parametric Technology Corporation)–All rights reserved under copyright laws of the United States and other countries. Information described herein is furnished for informational use only, is subject to change without notice, and should not be construed as a guarantee, commitment, condition or offer by PTC. PTC, the PTC Logo, Pro/ENGINEER, Windchill, Mathcad, Arbortext, Windchill PDMLink, Mechanica, Windchill ProjectLink, ProductView 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.