

# Creo® Advanced Framework Extension

GO FROM DESIGN TO FABRICATION IN RECORD TIME

Creo Advanced Framework Extension (AFX) gives engineers and designers the power to create structural frameworks much faster using powerful, simple-to-use features that are tailored to specific framework design tasks.

An integral part of the Creo product family, Creo AFX provides designers and engineers with a means to dramatically improve the accuracy and productivity of defining structural framework assemblies. Because this module is native to Creo, you can quickly and easily share this intelligent 3D model throughout all phases of the project—design, detailing, analysis, fabrication, and final assembly. Now you can achieve faster structural framework definition and meet or beat even the most aggressive project deadlines. Add Creo AFX to your cache of design tools and dramatically reduce the time to create accurate structures, frames, or assembly lines compared to 2D CAD and traditional 3D CAD solid modeling methods.



Putting together structures using Creo Advanced Framework Extension eliminates fit up errors, saves valuable engineering time, and reduces the cost of development.

## Key benefits

### Unified, integral design environment

- Fully associative modeling ensures that design changes are reflected throughout the design process
- Single digital definition—incorporating all manufacturing information—eliminates management of additional files
- Eliminate time-consuming data translation between software applications

### Simple

- Easy to learn and use
- Automates many tasks, significantly reducing design time
- 100% parametric definition speeds design of a wide variety of framework sections

### Powerful

- Quickly define corner joints and nodes between virtually any section
- Eliminate costly changes due to fit up problems or rework
- Fully associative definition adapts instantly to any design change no matter how difficult
- Seamless integration with Creo Simulate® for structural analysis

- Interface to other analysis systems via \*.SDNF and \*.DSTV
- Easily place screws and dowels with an interactive user interface

### Convenient

- Comprehensive library of sections, connections, and joints, accelerates framework creation
- Extensive library of stairs, ladders, and safety cages accelerates design of access and walkways
- Choose from a wide variety of steel and aluminum profiles, angles, endplates, screws, and more
- Create a library of your own unique components

### Productive

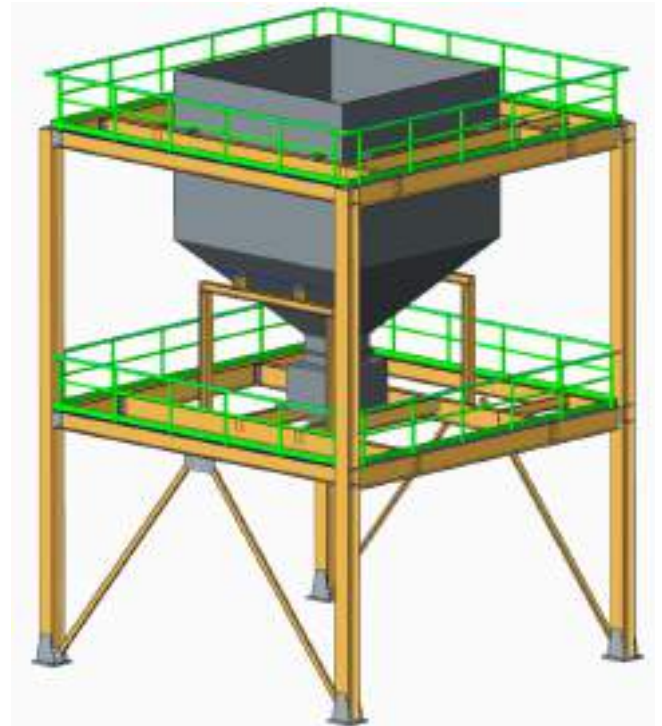
- Optimized user interface reflects the structural framework design process
- Reduce scrap by using appropriate connections, joints, and assembly methods
- Save on material costs through exact 'as-built' representation of the structural framework
- Incorporate manufacturing and fabrication data into the framework definition to speed assembly
- Precise 3D structural framework definition ensures fabrication of assembly is right the first time by detecting design and production problems before structures are built

### Capabilities and specifications

#### Supports top-down design process

- Start with conceptual design to create the framework skeleton using datum curves or imported geometry
- Assemble beams from a library of standard types and sizes
- Design joints between beams by selecting different corner types
- Design connector elements by selecting from a library of brackets, endplates, screws, etc.

- Define weldments for manufacturing
- Create BOM information and beam drawings automatically



Creo Advanced Framework Extension is the perfect tool for a variety of applications, including building structures, machine framework, and assembly lines.

### Wide variety of uses

#### Steel

- Industrial machinery
- Cranes and elevators
- Marine structures
- Buildings

#### Structures with standard aluminum extrusions

- Handling and packaging machines
- Conveyor systems
- Assembly lines
- Ladders and cages

### Structures with custom beams

- Windows and doors
- Facades
- Roofs

### Designing connections between beams

- Quick and easy assembly of connector elements
- All necessary features and modifications are made inside the beam parts, not assembly features
- Includes a library with connector elements including endplates, angles, brackets, and screws
- Add company-specific connectors to the library

### Other capabilities

- Automatic BOM creation, including stock tables
- Create weldments regardless of assembly structure
- Automatic creation of engineering drawings

### The Creo Advantage

Creo is a 3D CAD solution that helps you build better products faster by accelerating product innovation, reusing the best of your design 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 substantial value as quickly and effectively as PTC.

### Language support

English, German, French, Italian, Spanish, Japanese, Chinese (Simplified and Traditional), Korean.

### Leverage other Creo offers

Creo Advanced Framework Extension Lite provides limited framework design capabilities and is available with the entry level package of Creo.

### Platform support and system requirements

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

For more information, visit: [PTC.com/product/creo](https://www.ptc.com/product/creo) or contact your local sales representative.

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