Creo[®] View MCAD

ULTRA-SCALABLE VISUAL COLLABORATION

Creo View MCAD is a universal viewer that brings 3D MCAD product models, assemblies, drawings, images and documents to everyone's desktop for comprehensive interrogation and visual collaboration–all without the need for native authoring applications.

One of the biggest issues facing manufacturers is how to efficiently share the large volume of digital product content created throughout the product development process across the extended enterprise. With its compact, accurate 3D viewable format, Creo View MCAD allows complex product information to be quickly accessed. Now everyone can collaborate visually on product information, using markups to reduce rework and accelerate decision-making across the enterprise and beyond.

Key benefits

Accelerate the design process

By offering comprehensive view, markup and annotation tools, as well as market-leading performance, Creo View MCAD can accelerate the important design reviews that occur throughout the product development process. Now stakeholders around the world can simultaneously be involved in the design process. And with its ultra-scalability, Creo View MCAD supports a full range of visualization requirements, from simple desktop viewing of single CAD models to interaction with massive digital models of over one million parts.

Reduce IT infrastructure overhead

Having a single tool to view many types of detailed product data lowers the amount of overhead required from the IT department. A common, consistent interface that can access digital product definition data across the enterprise lowers expenses associated with software maintenance, product upgrades and internal training. Eliminating data interoperability issues translates into lower overhead and higher productivity.

Improve efficiency

Productivity improves by enabling engineers to easily share visual information across the enterprise, while still permitting users to accurately measure dimensions. Not only can Creo View MCAD accelerate time-to-market, but its visual collaboration and markup capabilities can also help reduce costs.



Easily and quickly share detailed visual information across the enterprise. Courtesy of Callaway Cars.

Increase control and security

Creo View MCAD allows critical business content (including models, drawings and documents) to be watermarked when collaborating on projects both within and beyond the enterprise.

Features

Simple and powerful viewer

Easy and intuitive user interface enables the visualization of MCAD models, documents and images in a common, consistent experience across the enterprise.

- Supports a wide variety of 3D model, 2D drawing and image source formats
- Supports (with optional adapters) all major MCAD formats, including: CADDS5°, CATIA V4, CATIA V5, NX°, I-DEAS°, SolidWorks°, Microstation° (DGN) and Autodesk° Inventor°
- View richly annotated model-based designs from Creo and CATIA[®] V5 (requires optional adapter)
- Visually integrate ECAD and MCAD information within the same user experience (also requires Creo View ECAD)
- Supports JT format (requires optional adapter)
- Instantly familiar, task-based user interface with undo/ redo capabilities
- Encompasses metadata and annotations to provide immediate reference information to the user
- Easily create smart exploded product views
- Supports STEP AP203 and AP214 standards for exchange of product structure and geometry information

Effective markup tools

Replace error-prone and inefficient paper processes with Web-based mark up and distribution.

• Full set of markup tools for 3D models, 2D drawings, images and documents

- Manage multiple markups
- Distribute markups across the extended enterprise
- Check markups back into Windchill® or other Product Lifecycle Management (PLM) systems and associate with source file for reference
- Cut, measure, mark up and manipulate sections in real-time



Detect and analyze clash issues with the optional Creo View Interference Analysis module.

Ultimate scalability and performance

- Rapidly load massive datasets and interact with them at good frame rates (requires optional module)
- Navigate through a model directly from within the PLM system using advanced 3D thumbnail technology
- Render graphics faster typically 10X faster than previous generations of ProductView
- Visualize and analyze configured product structures from Windchill

Identify and correct errors

Discovering design errors early in the product development process is a fundamental requirement of any manufacturing company.

- Check for different types of interferences such as physically interfering parts, parts that are in contact or parts that have a required clearance from each other (requires an optional module)
- Verify the annotated 3D Model for unambiguous representation of critical dimensions and tolerances and collaborate on the missing information (requires an optional module)
- Evaluate the functional behavior of your product through interactive animations (requires an optional module)

Filter visual information

Rich product queries can utilize spatial locations to reduce the amount of information required to locate components within a 3D model.

- Query based on product attributes such as material or color
- Query based on positional location (e.g., find parts that are within 10 mm of a position or specific part)
- Search for product properties or components based on multiple criteria
- Perform color-coded searches by attribute or spatial location
- In-graphics assembly, navigation and selection
- Accelerate design reviews by using comparison tools for identify changes in product structure, geometry, or attributes.



Analyze and color code designs using Product Attributes such as Weight, Lifecycle State, Spatial location and proximity using color coded search in Creo View.

Optional Creo View MCAD Extensions	
Creo View Interface for JT	Provides native import and export of JT format files
Creo View Toolkits (Web, Java, Office, Web GL)	Use a rich set of APIs to create interactive Web pages, customize visualization applications and embed Creo View technology in Microsoft applications such as PowerPoint*
Creo View PDF Review	Full document collaboration capabilities, including annotation, viewing and watermarking
Creo View Design Check	An interactive tool that provides rapid, digital verification of the design intent captured in the original 3D model-based design
Creo View Interference Analysis	Identify, understand and review interference issues early in the development process
Creo View Animator	High-performance animation for digital mockups
Creo View Massive Assemblies	Utilize the exceptional scalability of Creo View MCAD to explore even the most massive assemblies
Creo View Adapters	Provides the ability to 'publish' native MCAD files to lightweight, accurate Creo View formats

PLM-wide visualization

As an integral part of PTC's Product Lifecycle Management System (PLM), Creo View MCAD enables visualization of digital data within a wide range of PTC applications, including Windchill[®] PDMLink[®] and Windchill[®] ProjectLink[™]. Creo View MCAD has also been integrated with other PLM systems, so it can display designs based on many CAD applications and other data formats, as well as facilitate electromechanical design collaboration.

- Measure and mark up product viewables
- Embed Creo View MCAD viewables within Arbortext[®] publications
- Use rich watermarking to prevent uncontrolled screen shots and printing
- Dynamically insert into Creo View MCAD from Windchill

Platform specifications

Microsoft[®] Windows[®], Solaris/AMD, Linux

Languages: English, Japanese, French, German, Italian, Spanish, Chinese (Simplified & Traditional), Korean, Russian

For the most up-to-date platform support information, please visit: <u>PTC.com/partners/hardware/current/support.htm</u>

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