

Creo® Tolerance Analysis Extension Powered by CETOL™ Technology

ANALYZE GEOMETRIC TOLERANCE AND VARIATIONS

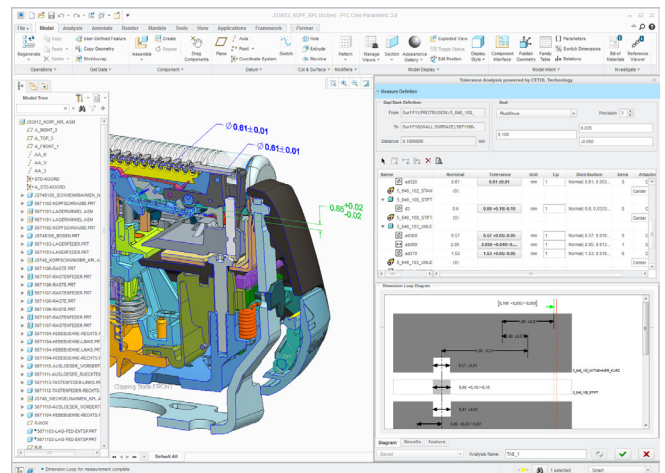
To deliver high quality products to market faster, designers must understand tolerances and the impact of manufacturing variation on their product designs.

With Creo Tolerance Analysis Extension (TAE) powered by CETOL Technology, design engineers gain powerful tolerance analysis capabilities within their design environment. You can easily analyze, visualize, and understand the geometric tolerance stack-up and dimensional variation that impacts your design.

Optimize design for manufacturability

Designers must be able to see tolerances and variations on their design models, analyze sensitivities, and visualize cumulative tolerances in order to engineer robust designs that won't fail in the manufacturing process. It saves both time and money to analyze and incorporate manufacturing tolerances and variation constraints early on.

Creo Tolerance Analysis Extension powered by CETOL Technology provides a robust tolerance stack-up and gap analysis solution that is integrated into the design environment. You can evaluate the seamless impact of tolerances and dimensioning schemes on the feasibility of product designs. The result: shorter product development cycles, lower product cost, and higher product quality.



Easy-to-use, powerful tolerance analysis capabilities are now integrated directly into the Creo design environment with Creo TAE powered by CETOL Technology.

Key benefits

- Evaluate the impact of tolerances on the manufacturability of designs
- Enable concurrent engineering to ensure designs meet manufacturing requirements
- Six Sigma design methodologies to ensure design quality
- Streamline design processes, improve productivity, and reduce time-to-market

Capabilities and specifications

Easy-to-use capabilities

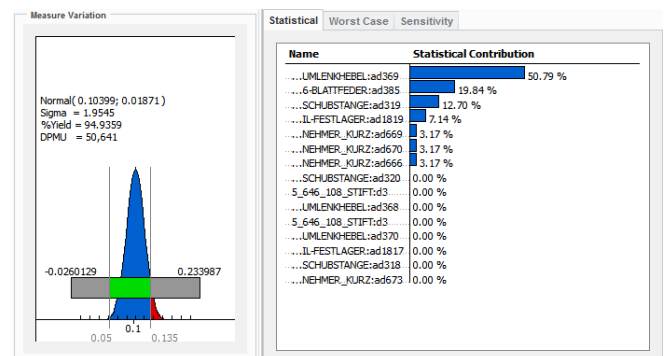
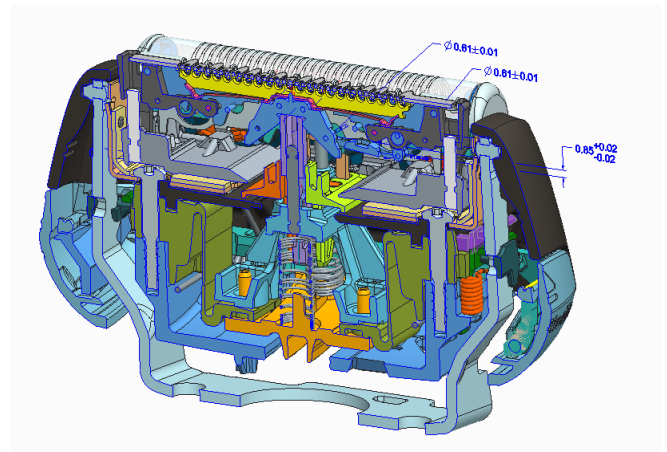
- Integrated graphical user interface is easy to learn and use
- 1D tolerance loops
- Tolerance stack-ups
- Automatic validation of dimensions and dimension loop
- Interactive visualization of the tolerance loop
- Profile and position GTOLS supported
- Tolerance analyses can be saved as a feature in Creo
- Part of assembly-level management of tolerance analyses
- Quickly edit analysis inputs by deleting or substituting components and dimensions

Powerful analysis

- Contribution and sensitivity analysis
- Configurable biasing of pin/hole joints
- Worse-case and statistical analysis
- Reference driving as well as annotation dimensions
- Placeholder components enable simulation of dimension properties that are not accounted for in the CAD model
- Automatically closes gaps in the model

Results

- Contribution and sensitivity output plots
- Automatically generated HTML results report
- View worst case and statistical distributions
- Mean and standard deviation
- Dynamic display of results within the Tolerance Analysis Feature
- Results such as sigma defects per million units (DPMU) and % yield can be saved as parameters in the Tolerance Analysis feature



Creo TAE powered by CETOL Technology lets you graphically view variation and statistical contribution results.

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), and Korean

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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