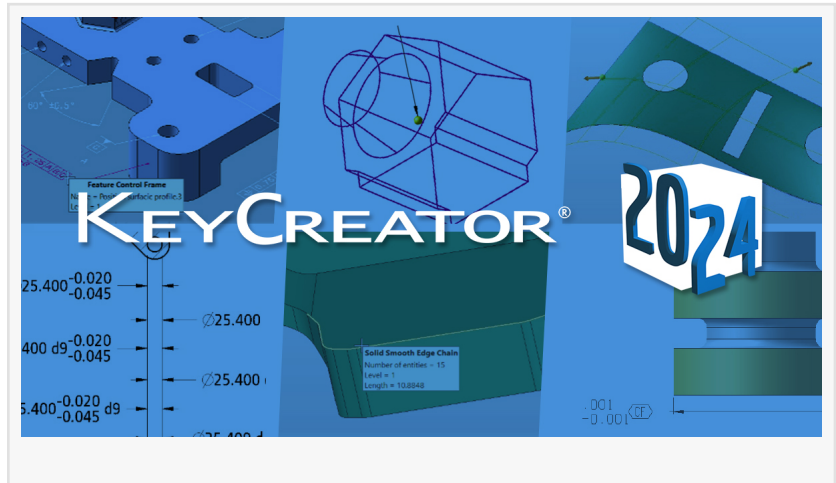


Kubotek Kosmos Launches KeyCreator 2024 Centered On Manufacturing Tolerances

Significantly improved tolerance capabilities for reading 3D annotations, applying tolerance fit grades to dimensions, and other key productivity enhancements

MARLBOROUGH, MA, USA, October 26, 2023 /EINPresswire.com/ -- [Kubotek Kosmos](https://www.kubotek.com), a leader in engineering and manufacturing geometric software technology, today announced the availability of the 2024 release of the



[KeyCreator CAD software](https://www.kubotek.com) product line. The primary improvements for users are in these areas:

- Reading 3D tolerance and datum annotations from all major mechanical CAD software
- Fit grade dimension settings linked to a tolerance fit database
- Face color/materials transfer between bodies during 3D modeling operations
- Updated CAD file translators

Semantic Read of Manufacturing Annotations

The 2024 release continues to expand KeyCreator support for Model-Based Definition (MBD) strategies. In practice, these unambiguously define parts by attaching Product Manufacturing Information (PMI) annotations such as Feature Control Frames to the faces of precise 3D models. This eliminates the need for mechanical drawings, thereby saving time, reducing potentially critical communication errors, and improving automation capabilities. KeyCreator products now preserve the semantic definition when reading PMI entities from all major CAD formats including CATIA, NX, Creo, SolidWorks, and Inventor. This allows users to quickly edit values and attributes of these annotation entities (for example, to reposition or copy text) as if they were created in KeyCreator. Additionally, new support for Continuous Feature and Unequally Disposed Tolerance symbols has been provided.

These capabilities have been developed using the [Kubotek Kosmos 3D Framework](https://www.kubotek.com) translation libraries. This technology underlies the Kubotek Kosmos CAD Utility programs, which have been implemented in aerospace and other high-precision fields for years, allowing for continual refinement of the most rigorous data integrity protocols.

Automatic Tolerance Values Based on Fit Grade

Dimension entities in KeyCreator 2024 products have been upgraded with new options to support tolerance fit designations for non-threaded cylindrical parts and mating features. Users have options to display different combinations of class designations and tolerance dimensions for the shaft, the hole, or both. An integrated customizable database provides preferred tolerances based on International Standards Organization (ISO) 286. KeyCreator 2024 automatically updates dimension tolerance values appropriately if the nominal dimension value moves into a new size range. The functionality helps define the engineering need in a mating shaft/hole, reduces clutter on detailed drawings, and removes the need for error-prone manual entry to update tolerance values.

Maintain Face Format Attributes Used to Automate NC Programming

A common CAD practice in the automotive tooling industry is to code faces on the model with color attributes in order to exchange tolerance and manufacturing information with NC systems (to help automate programming of machining cycle parameters). KeyCreator 2024 provides additional support for this practice by enhancing several split and unhook modeling functions to automatically transfer face attributes like color from the original body to the resulting body.

Increased Translator Support

Translators to support data from ten separate major CAD formats have been updated since the previous major release of KeyCreator, including four formats from Dassault Systems and four from Siemens Digital Industries Software. Read of Autodesk's Inventor part and assembly files has been extended to the 2024 format and has become the eighth format for which KeyCreator provides MBD support for PMI entities.

The KeyCreator Product Family

All KeyCreator products are Windows-based, locally installed, and provide a range of permanent and lease options. A shared file format native to all KeyCreator products (identified with the CKD file extension) allows teams to take advantage of specialized functions throughout a project, from hands-on direct modeling to mechanical drawings to team review. A read-only viewer available at no cost, KeyCreator CKD Viewer, is capable of reading all design data in the KeyCreator CKD format, whether from the 2024 release or any previous version.

About Kubotek Kosmos

Kubotek Kosmos empowers specialized software to utilize engineering data from numerous sources at high-fidelity and optimal performance. Our applications in manufacturing assure many of the world's most advanced build-to-print suppliers creating complex aerospace components that precise part definitions are being exchanged correctly between engineering systems. Our flexible direct CAD products are popular in tooling design and unconstrained conceptual modeling. The Kubotek Kosmos proprietary multi-platform geometric technology, available for licensing, implements the latest hardware and software standards to speed time to market, reduce costs, and improve quality.

Kubotek Kosmos development and support staff are based in Marlborough, Massachusetts. It operates through a wholly-owned US subsidiary of Kubotek Corporation which is headquartered in Osaka, Japan.

John W McCullough

Kubotek Kosmos

[email us here](#)

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