KEYCREATOR®

Delivering Quality Design with Speed and Flexibility

KeyCreator is award-winning CAD/CAM software that takes a Real Geometry approach to 3D modeling. The product earns equal praise for its ability to quickly create design

concepts from scratch, make changes to any model in any format, and extract and modify geometry in real-time on imported CAD models. This new approach in design software, with smart tools and real flexibility, is a fresh alternative to rigid history-based systems.



When you need a CAD package that can deliver fast, look no further than KeyCreator software. Whether the task is product innovation, complex tooling, or custom machinery concepts, what remains common is the need to work quickly. No matter whether you are designing from scratch or using whatever type of customer data is available, KeyCreator is the right tool to deliver better designs. KeyCreator software is significantly different from other CAD software because it uses real geometry to deliver its flexible modeling approach. KeyCreator offers a complete set of advanced 3D modeling tools to speed the design of products, parts and assemblies. Editing capabilities allow the designer to concentrate on the current geometric shape, without being locked down by the history of how the shape was created. KeyCreator gives engineers the most flexible platform for moving between 2D, 3D, solid and surface modeling, and drafting environments.

TECHNOLOGY BREAKTHROUGHS IN KEYCREATOR MAKES MODEL EDITING EASY

Kubotek has advanced CAD technology with a broad range of tools to extract intelligence and manipulate geometry in real-time. Rather than place all the model construction history into the file, Kubotek has developed smart tools to discover features and enable direct editing of geometry - any geometry. Unlike explicit modeling techniques of the past, our real geometry editing technology discovers features in real time with intelligent and dynamic assessment of inherent associations between individual components in the geometry. Yet, once you explore the real-time recognition of data present in the geometry, using the tools opens up whole new opportunities to leverage existing design assets or prepare for efficient downstream manufacturing.



Feature discovery functionality allows dynamic search of imported or native parts for relationships between faces and then easily edit the selection.

REVOLUTIONIZING CAD USING NATIVE OR IMPORTED GEOMETRY

Unique technology in KeyCreator supports searching solids for features or patterns of features, even filtering for size range or simply selecting single features or patterns with the cursor. That means that when your cursor flies over the model it identifies and displays the features the user wants to see. Once features are discovered, users can simply type new values into parameter fields to have features automatically update to the new size. This means that any solid model, regardless of file format, can be modified with ease.

Another breakthrough capability in KeyCreator allows users to simply clip off portions of a solid and turn the geometry into a new, separate solid. The resulting solids are automatically healed around the separation area. Additional capabilities support quick placement and re-orientation of selected solids onto another solid with automatic extension or clipping of the mating area. We call this Prune and Graft. Kubotek has pioneered this functionality to ensure design reuse can be leveraged to lower development costs and speed time to market.

DESIGN

KeyCreator provides a unique and exceptioally prductive workflow for conceptual modeling, mechanical design and tooling design. KeyCreator allows teams to freely move between 2D and 3D models faster and easier than ever before. The results are clear - higher quality products in shorter cycles. KeyCreator's geometry-based foundation supports an intuitive and completely freeform approach to drawing and modeling.

Powerful face deformation capabilities provide freeform model editing and tangency condition repair.



Users begin building a model or construction geometry in a simple, unstructured environment. No need to be concerned about the number of separate parts the refined model will include or to which part each piece of geometry will belong. This flow lets the designer leave behind rigid organization structures imposed by history-based modeling. Taking advantage of open 3D geometric modeling capabilities, designers have the flexibility to attack inefficiencies at the conceptual, editing and refinement phases of any project. KeyCreator excels in delivering the versatility required for mechanical design, shape creation and tooling design.



Unique Prune and Graft functions allow feature geometry to be easily reused in new locations and orientations.

ASSESS

The most practical benefit of designing with 3D solids is the ability to interrogate form, fit and function as virtual prototyped models. The ability to check designs that have been simulated in 3D helps identify problems not obvious on a 2D drawing. Detecting issues in advance, well before incurring expensive mistakes, goes a long way towards ensuring successful downstream manufacturing.

The assessment tools in KeyCreator serve as a valuable front-end to the manufacturing process. From measurement to model verification and visualization, KeyCreator provides precise volume and interference condition calculations in seconds and enables quick

observation of a design from any angle or dynamic rotation. The 3D assessment tools in KeyCreator facilitate a rapid understanding of how components interact and fit together. The wide range of data available helps designers and engineers identify challenges in the ability to build the model.

DELIVER

Design and manufacturing engineers need the ability to precisely document and communicate a design to customers, partners, and manufacturing teams. KeyCreator presents a wide variety of tools to deliver professional drawings, operations sheets, efficiently and accurately.

KeyCreator speeds and improves the process of creating, updating, finalizing, and sharing engineering documentation. Starting with a 3D model, KeyCreator automates the process of generating drawing views and details saving hours of work over straight 2D drafting. KeyCreator automatically updates views and

dimensions when the model is changed to eliminate the need for error-prone detail work. However, when 2D drawings are created from scratch or existing drawings need maintenance, KeyCreator has the pure 2D drafting horsepower to get the job done fast.

- Comprehensive Dimensioning
- Choice of Drawing Output
- Automated Drawing View Creation



Machine produces surgical sponges by folding and cutting spools of cotton. Model compliments of SDI Inc.

Comprehensive CAD System

Assessment

Measurement and Verification Dimension Accuracy Checking File Referencing

Full Suite of CAD Translators

Customizable Toolbar Interface

©2008 Kubotek Corporation. All rights reserved. Kubotek, KeyCreator, CADKEY, and Validation Tool are trademarks or registered trademarks of Kubotek Corporation in the USA and/or other countries. ACIS is a trademark of Spatial Technology Corporation. Autodesk Inventor, AutoCAD are trademarks of Autodesk Inc. Catia is a trademark of Dassault Systemes. Pro/E, Pro/ENGINEER, and Pro/E Wildfire are trademarks of PTC Corporation. SolidWorks is a trademark of SolidWorks Corporation. NX is a trademark of Siemens AG. All other trademarks contained herein are the properties of their respective owners.

Open 3D Modeling

Surfaces

Wireframe

2D and 3D

Real Geometry Editing

Direct Features

Deform Techniques Model Repair

Solids

Faces





Marlborough, MA 01752 800.372.3872 • 508.229.2020 • 508.229.2121 fax