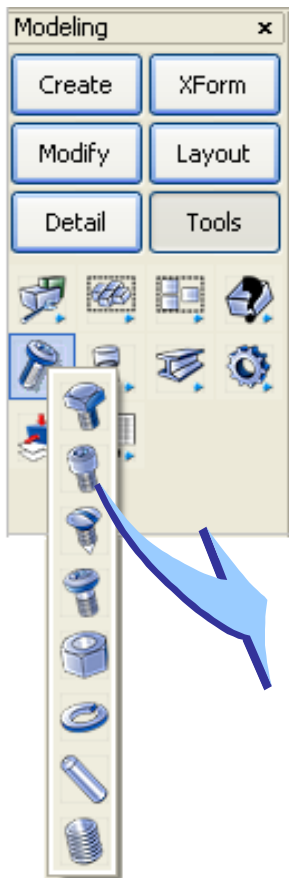


Chapter Four

Integrated Mechanical Design Library

Many CADKEY users over the years have taken advantage of the extensive mechanical design elements available in the DraftPAK Module. You'll be happy to learn that these powerful features that were formerly purchased as a separate module are now an integral part of KEYCREATOR. In addition to the obvious economic benefits, the tools are more logically accessible, as part of the basic Modeling Application Menu.

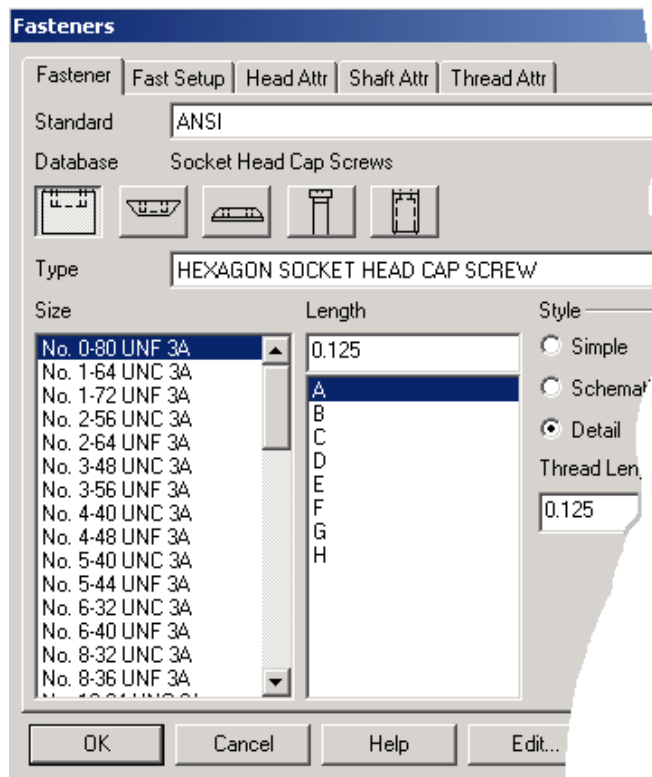
Fasteners



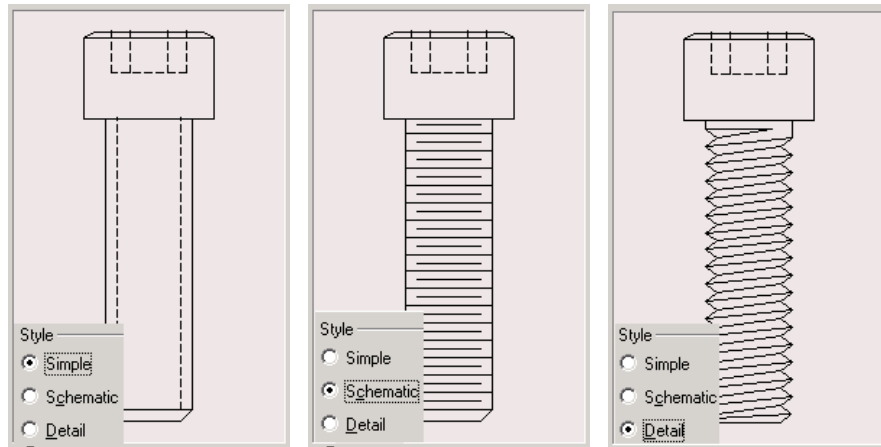
KEYCREATOR provides you with an extensive fastener database.

For each type of fastener, you can specify a multitude of sizes and lengths.

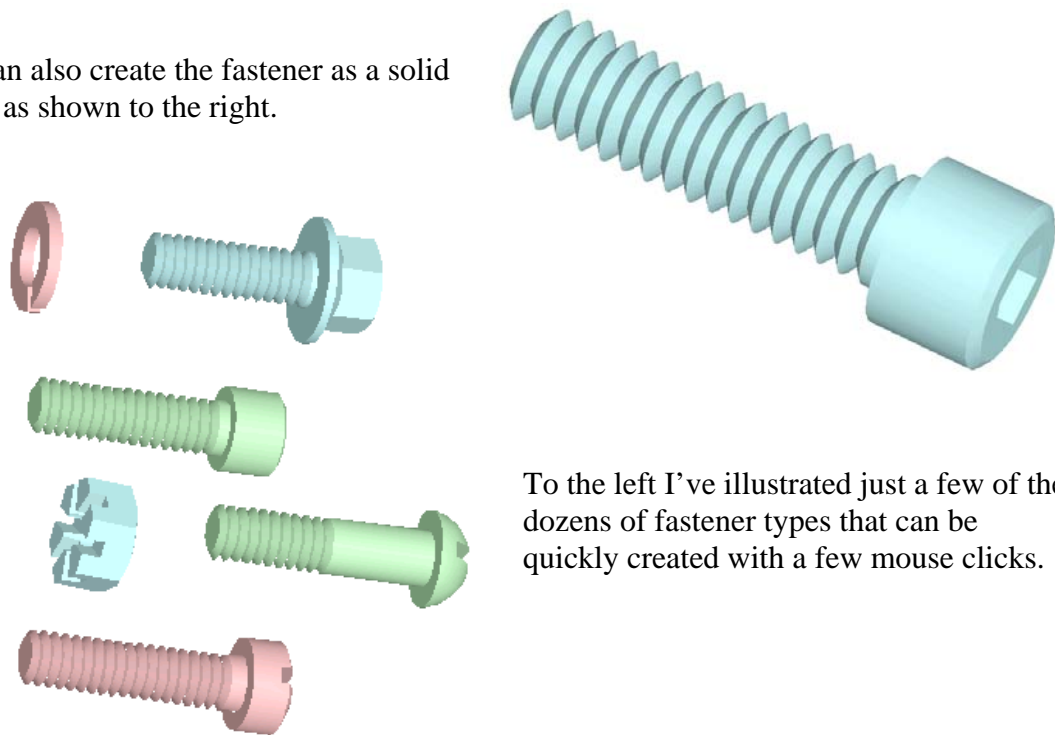
You can also specify a simple style, schematic, or detailed development.



A typical Socket Head Cap Screw is shown below using the Simple, Schematic, and Detail Options.



You can also create the fastener as a solid model as shown to the right.

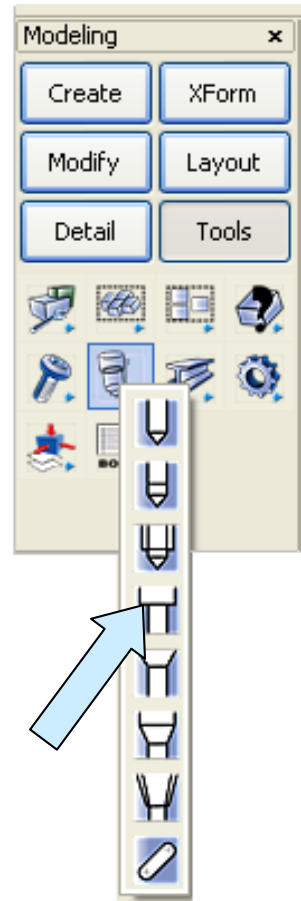
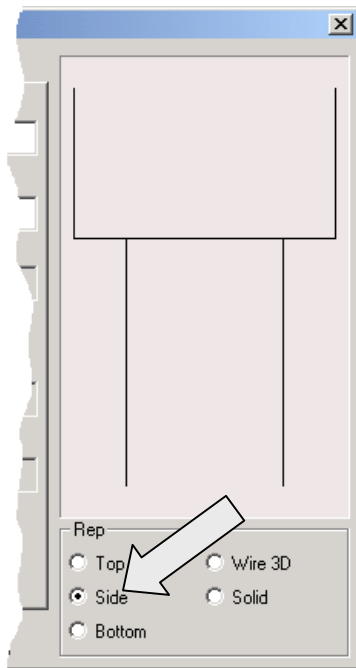


To the left I've illustrated just a few of the dozens of fastener types that can be quickly created with a few mouse clicks.

Since drawing fasteners represents one of the most time consuming drafting tasks, why not take advantage of the wealth of fastener models already provided by KEYCREATOR?

Features

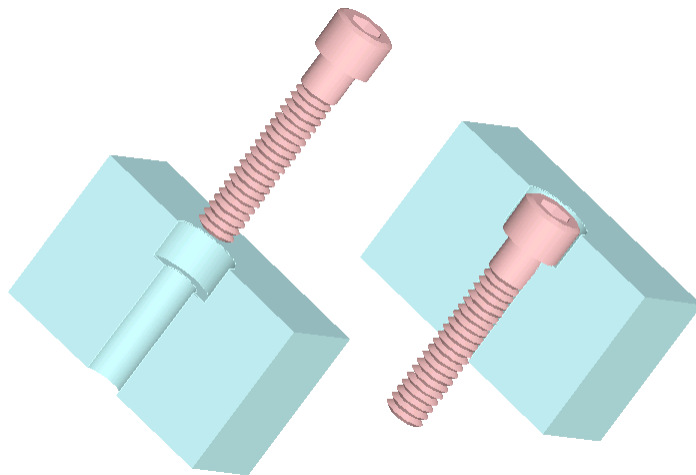
KEYCREATOR provides you with a comprehensive set of mechanical features such as counter-bores, countersinks, and pipe threads that can dramatically reduce drafting and modeling time.



Two-dimensional features can be quickly specified and added to conventional drawings.

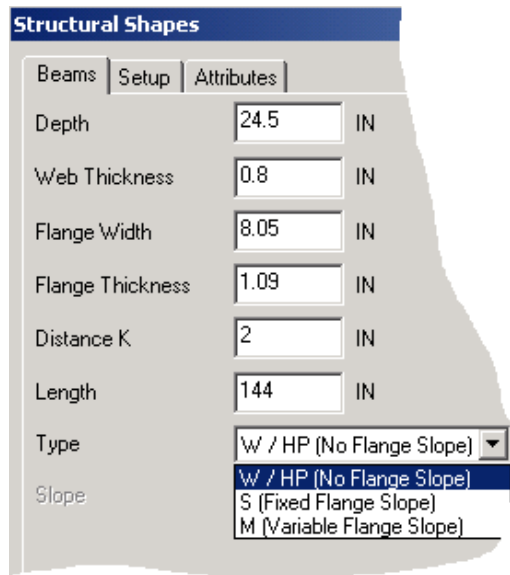
You can also create the features as three-dimensional solids that are automatically machined from a parent solid object at your direction!

I've illustrated a counter-bore machined on the edge of a block in the picture to the right.



Structural Shapes

A large assortment of stock structural shapes can be quickly specified and modeled, both as two-dimensional details and three-dimensional solid models.



Mechanical Elements

You can also quickly create gears, racks, springs, sprockets, chains, and bearings to add to your mechanical designs.



Chapter Five

New System Features

KEYCREATOR provides the astute user with powerful new file handling and manipulation tools. A completely redesigned level manager, universal batch translator, and powerful dynamic entity selection are just some of the new features that take you far beyond the capabilities of CADKEY 19 and earlier CADKEY releases. We've already covered level management in the introductory pages of this book. Let's look at some other dramatic tools that simplify your work!

Instant Printing of Level Lists

You can instantly print out any level list by simply clicking in the level list area and then clicking on the PRINT Icon.

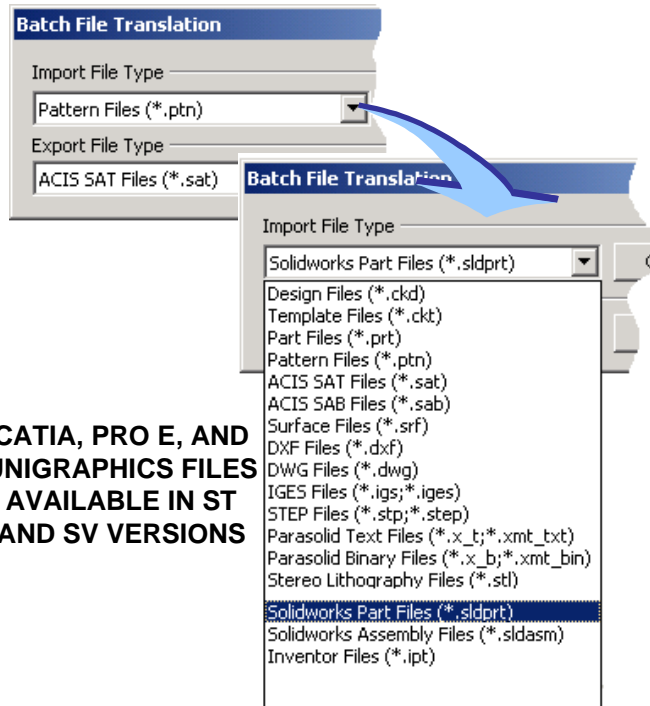
The Batch Translator

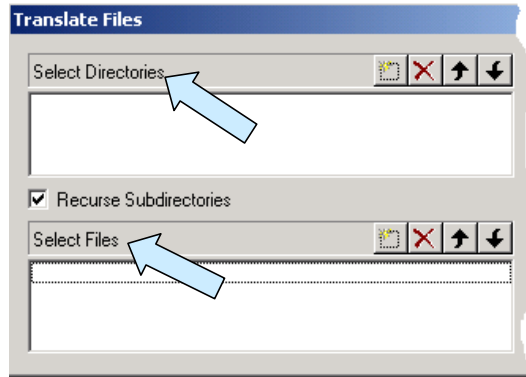
Sharing design information is part and parcel of modern design and manufacturing.

The Batch Translator provides you with one, easy to use central utility that will convert files between various formats.

CK Design, Part, Pattern, step, iges, sat, parasolid X_T, dwg, dxf, stl formats are supported for both import and export.

You can also import directly SolidWorks and Inventor Files.





You can build a session by specifying single files or by just specifying entire folders of files.

The translation capabilities can also be accessed on an individual basis using the traditional File Import and File Export functions. You can also export windows metafiles, tif, hoops streaming, to produce images for presentation purposes.

For users who often deal with Pro E, Unigraphics, or Catia4, the ST version of KEYCREATOR provides direct translation from these formats. The Catia translator is also bi-directional.

The SV version of KEYCREATOR provides all of the translation capabilities above except that the Catia import translator is for version 5.

Dynamic Entity Selection

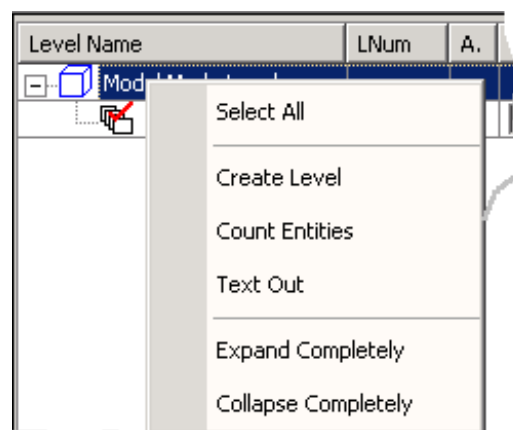
Dynamic Entity Selection dramatically changes the way you select entities on the screen. In the past your options for selecting entities on the screen were relatively limited. Now, you can skip selecting one of the options from the Conversation Bar (Single, Window, Chain, etc.) and simply move over an entity and click on it when it highlights. You can also dynamically window select a group of entities and then de-select one or more of the selected entities by clicking on them.

Right Mouse Click Context Sensitivity

Another great improvement over CADKEY 19 is the large number of options available using the right mouse button.

Because of context sensitivity, clicking the right mouse button will bring up specific menus of options depending on the particular cursor position.

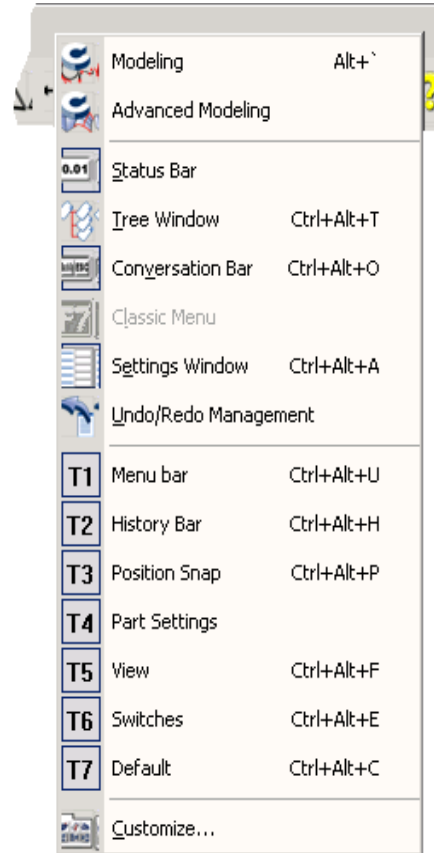
The options illustrated to the right appear when right mouse clicking on the header row of the level list. Earlier in the book, we used the right mouse button to access other level functions such as the rename option.



The options illustrated to the right appear when right mouse clicking in a blank area of the top bar.

This particular RIGHT MOUSE CLICK gives you instant access to controlling the display of application menus, control bars, and toolbars.

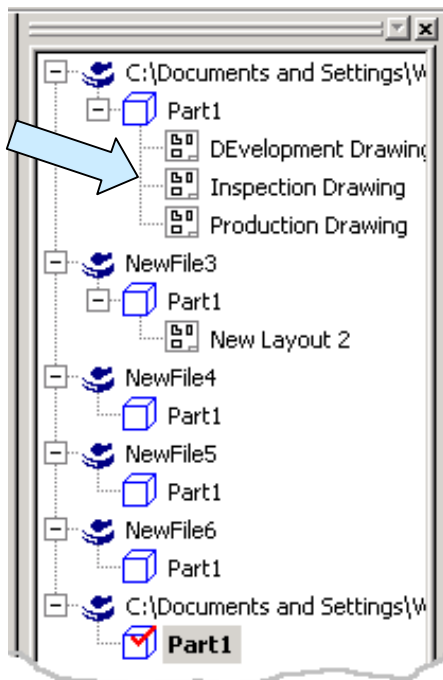
This saves a lot of time when you want to quickly modify the interface to free up space or display selected tools for special operations.



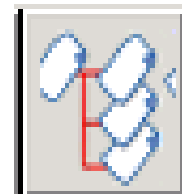
Navigating between files using the Tree Window

Another new feature is the powerful Tree Window navigation utility. When multiple files are open, the Tree Window provides you with instant access to any open file.

You can also quickly see a list of all layouts associated with a given file.



Instead of accessing a layout by using the maneuvering through the Layout Commands, you can simply use the Tree Window to get instant access.



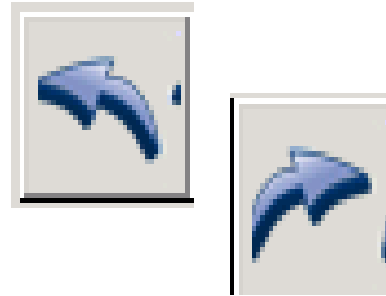
You can collapse substructures such as layouts in the tree window by clicking on the “-“ sign in front of the parent entry.

This conserves space and minimizes scrolling in cases where you have several files open with multiple layouts.

Unlimited Undo-Redo

A major improvement over CADKEY 19 is the inclusion of an unlimited Undo-Redo capability that handles virtually all operations including deletes, trims, xforms, and level operations.

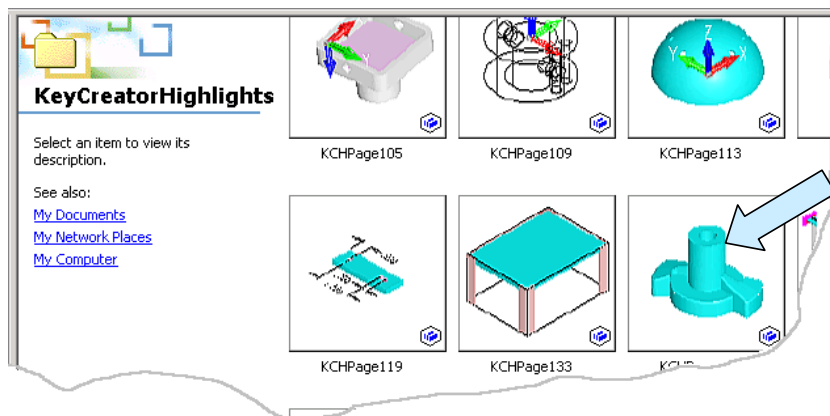
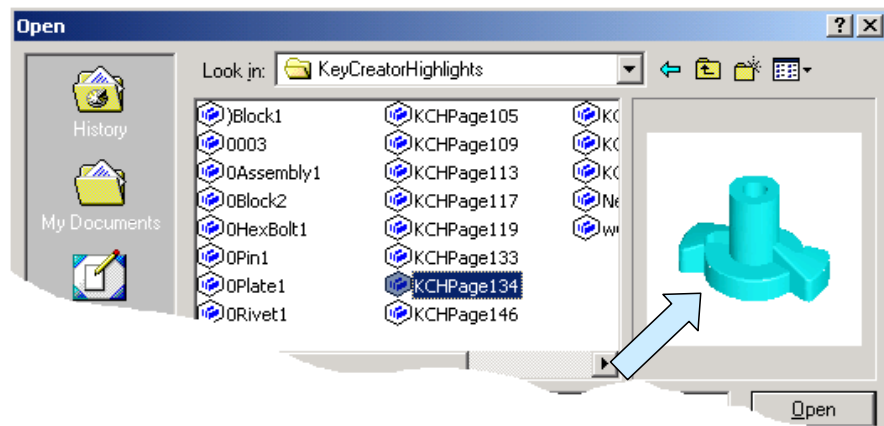
This one feature alone has been considered by many users to be reason enough to upgrade from the old CADKEY architecture!



Automatic Universal File Thumbnails

Those of you who manage large numbers of files will love the automatic creation of universal thumbnails for all saved files.

The thumbnails are available in the preview screen when opening a file.



They are also visible in Windows explorer so that all corporate users can see a picture of the part while browsing.

