



KEYCREATOR®
PRO

What's New KeyCreator Pro 2023

● Benefits	3
● Support of MBD/PMI	4 - 12
Enhancements to Detailing/MBD/PMI	
o Iso Fit Tolerances	
o Surface Finish Symbols for New JIS Standard	
o Numerous FCS Enhancements	
o New Attachment Points on Dimensions and Annotations	
o Added two Dimensioning options	
Improved Entity Selection and Dialog Interaction	
o Parent Entities are selected first where applicable	
o Automatic exporting of Lightweight part references	
o Remembering the last Tree Item used	
Improved The Sketch Function Usability	
o Added Set Arc Radius and Angle increments	
o Locking a DynaHandle Axis	
Improved Composite Functions	
o The Composite> Make function only executes once	
o Sortable Composite List	
More Consistent Placement of Washers	
o Washers use the same bottom base point as other Fasteners	
o Identifying Associated Views for Instances	
o Improvement to Unstitched Faces using Materials	
o Performance Improvement for True Type Fonts	
o Head -On Views Direction Arrow Selection	
● Interoperability	13
o New Native Formats	
o Updated Formats	
● Solution Partners	14
o 3DfindIt from CADENAS GmbH	

Benefits

The KeyCreator Pro 2023 release productivity and performance benefits were based on data collected from KeyCreator users focused on reusing CAD data and productivity without interrupting established workflows. For those who work with the aerospace and automotive industries, you are aware of the increased use of MBD/PMI technology. This required upgrading to latest standards and continued improvements to our detailing tools. These improvements include:

- ISO Fit Tolerances
- New JIS Surface Finish Standard
- Improved Feature Control Symbols (FCS)
- Ability to Add Multiple Datums
- Reference Tolerance for Annotations
- New Attachment Positions on Dimensions and Annotations.
- Added Two Dimensioning Options

Additional KeyCreator 2023 productivity improvements address useability & eliminating the extra steps in various functions. These include:

- Improvements to Sketching
- Improved Selection in Functions
- Automating Export of Lightweight Part References
- Improved Composite Function
- Placement of Washers
- New Prefix to Associative Views in Layout
- Improvement to Unstitched Faces using Materials
- Performance with True Type Fonts
- Head-On view Direction Arrow Selection

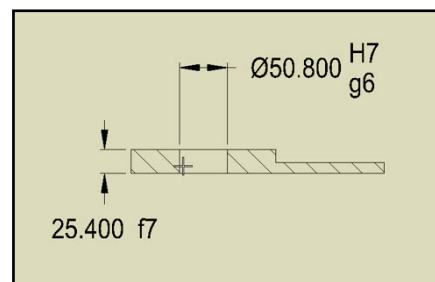
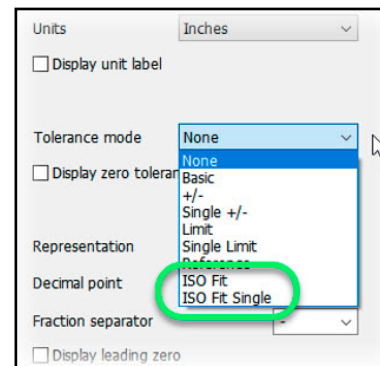
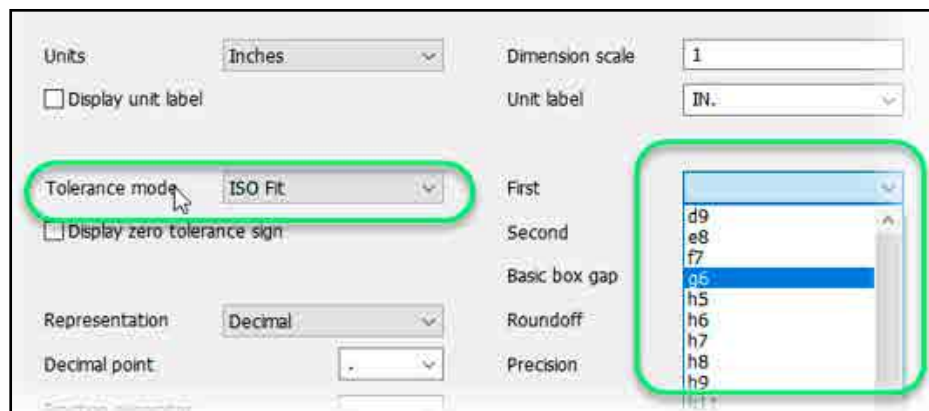
KeyCreator 2023 continues improving import interoperability by adding Catia V6 3DXML, Rhino and JT file types. Nine other translators were updated to their latest versions.

Enhancements to Detailing/MBD/PMI

Updated to ASME Y14.5-2018 and new JIS standards.

• Iso Fit Tolerances

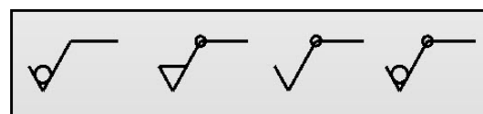
Two new ISO fit tolerance options were added to dimension creation and Restyle> Tolerance as part of the initial ISO Fit implementation. These tolerance codes are defined in a user-editable file allowing for customization.



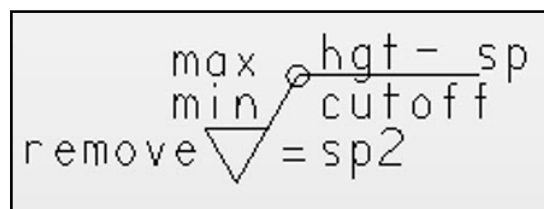
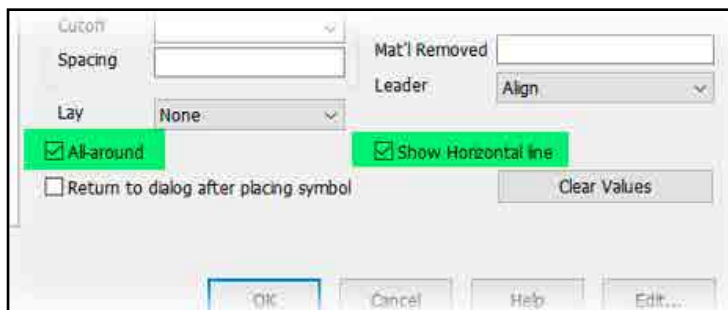
• Surface Finish Symbols for New JIS Standard

Added two options to meet the JIS standard to create four new Surface Finish symbols. The new options are:

- o All-Around
- o Show Horizontal Line

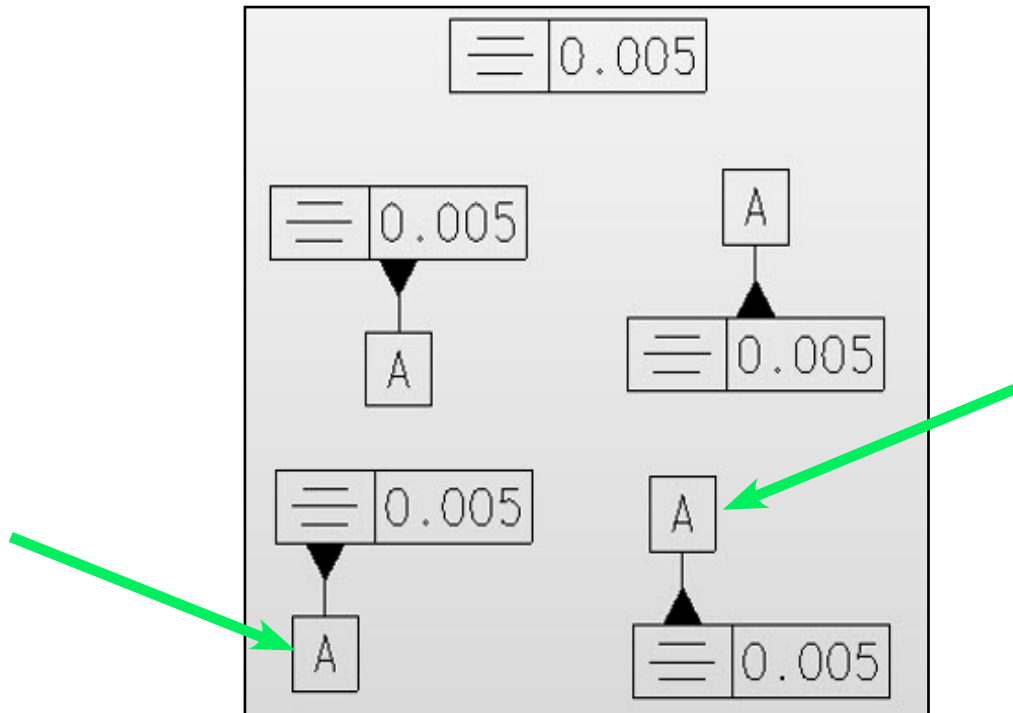


In addition, the formatting has been updated to be left justified with the horizontal line extending to the right

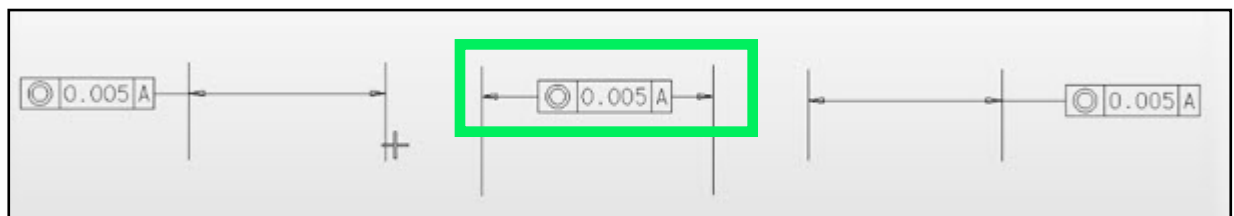


- **Numerous FCS Enhancements**

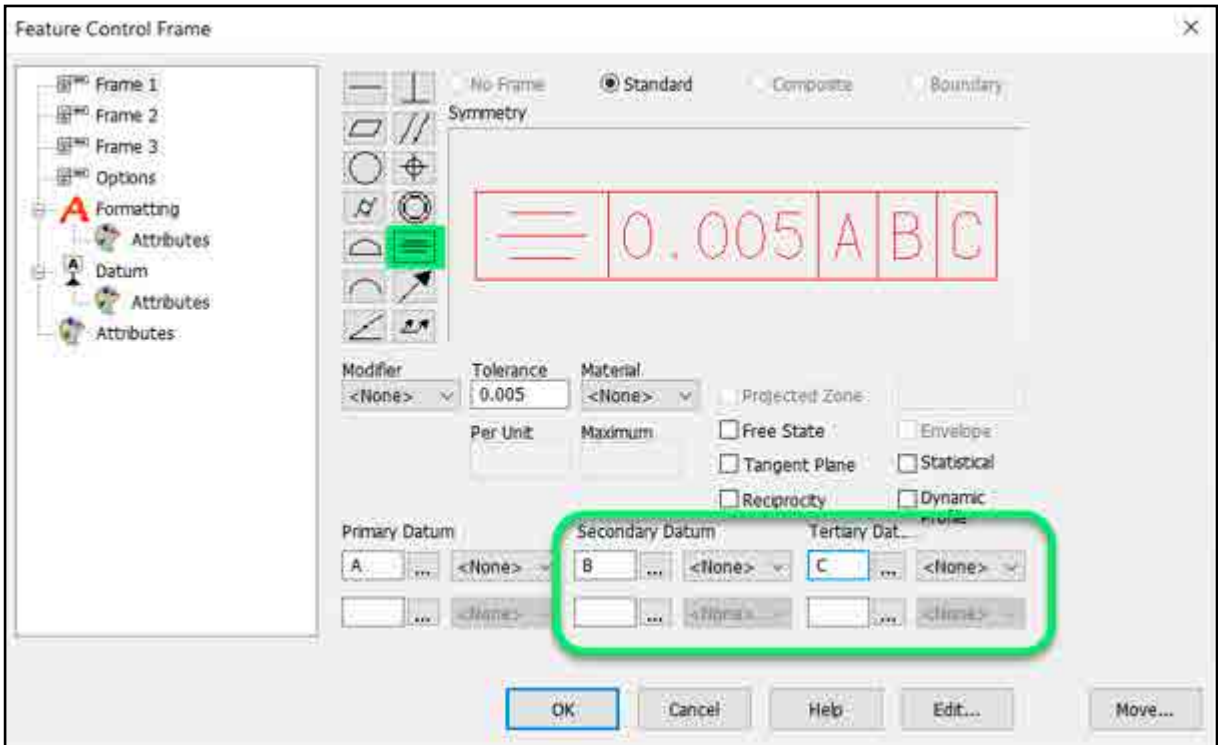
To meet standards, two additional Datum placement options, above or below, have been added to the Feature Control Symbol dialog.



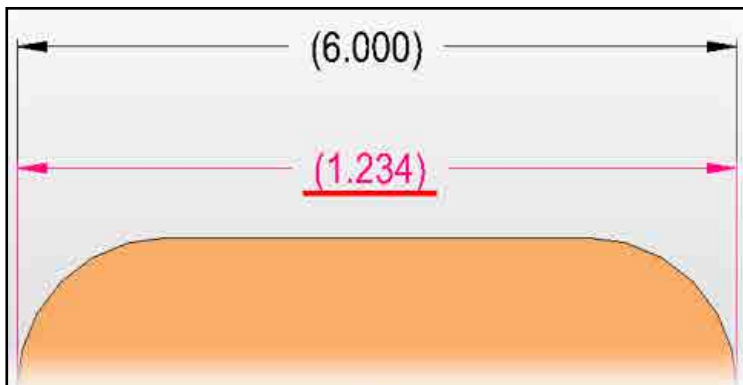
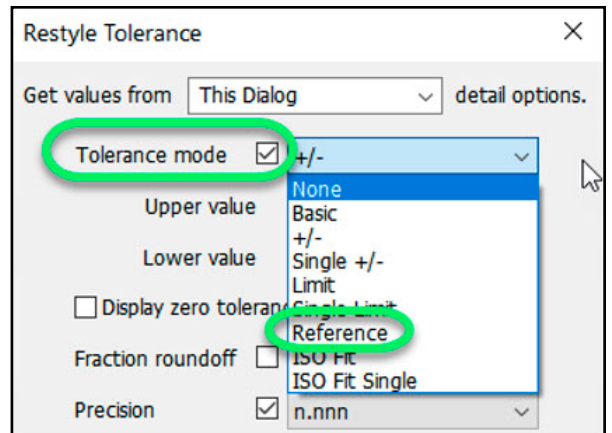
The Feature Control Frames can be placed between the leader lines using the Linear Dimension style.



Multiple Datums can be placed on the Symmetry frame.

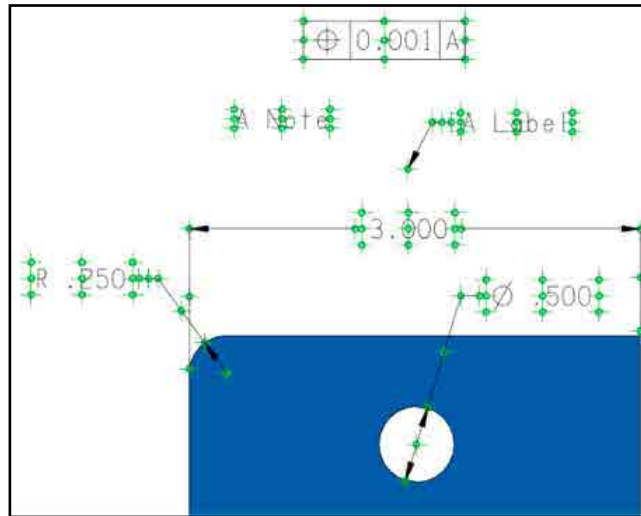


A new Reference tolerance mode is available in dimension creation, edit and Restyle> Tolerance. This mode adds (parentheses) around the displayed text, including User Text (red underlined).



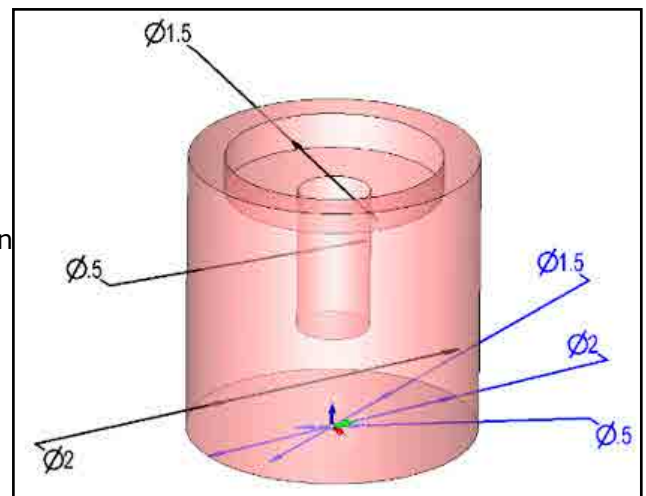
- **New Attachment Points on Dimensions and Annotations**

The frequently requested ability to attach entities to dimensions and annotations has been addressed in this release. New attachment points, shown in green, are available.

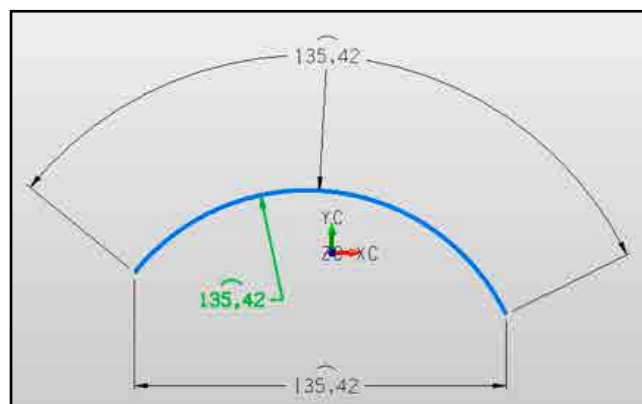


- **Added two Dimensioning options**

As MBD/PMI usage grows, it will require dimensioning cylindrical faces, not just edges, on the 3D model. KeyCreator radial & diametric dimensions will now accept a cylindrical face. The dimension placement follows the Z Lock/Z Free toggle, with the dimension being attached at the Face selection when in Z Free mode



Arc Length Dimension has a new Radial option (green)



Improved Entity Selection and Dialog Interaction

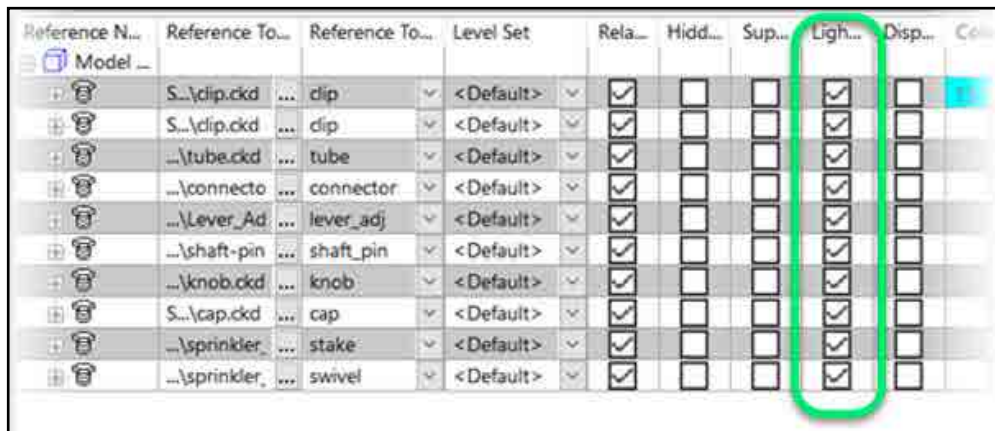
- **Parent Entities are selected first where applicable**

Users no longer need to toggle to the parent solid, when removing solids from a composite or Generic Edit on bodies.

Set Materials selects the body when window selections include both body and all their faces.

- **Automatic exporting of Lightweight part references**

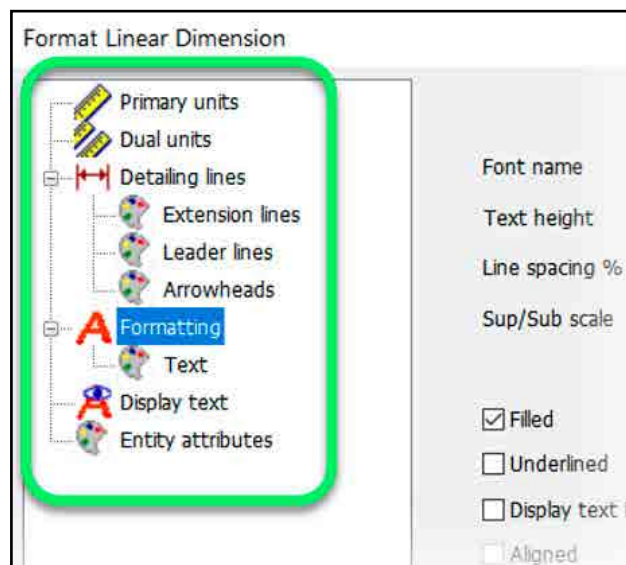
Removed the extra user interactions to toggle Lightweight Off and repeat the export.



Reference N...	Reference To...	Reference To...	Level Set	Rela...	Hidd...	Sup...	Ligh...	Disp...	Colo...
Model ...									
+	S...\dip.ckd	dip	<Default>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
+	S...\dip.ckd	dip	<Default>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
+	...\tube.ckd	tube	<Default>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
+	...\connecto	connector	<Default>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
+	...\Lever_Ad	lever_adj	<Default>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
+	...\shaft-pin	shaft_pin	<Default>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
+	...\knob.ckd	knob	<Default>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
+	S...\cap.ckd	cap	<Default>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
+	...\sprinkler	stake	<Default>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
+	...\sprinkler	swivel	<Default>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

- **Remembering the last Tree Item used**

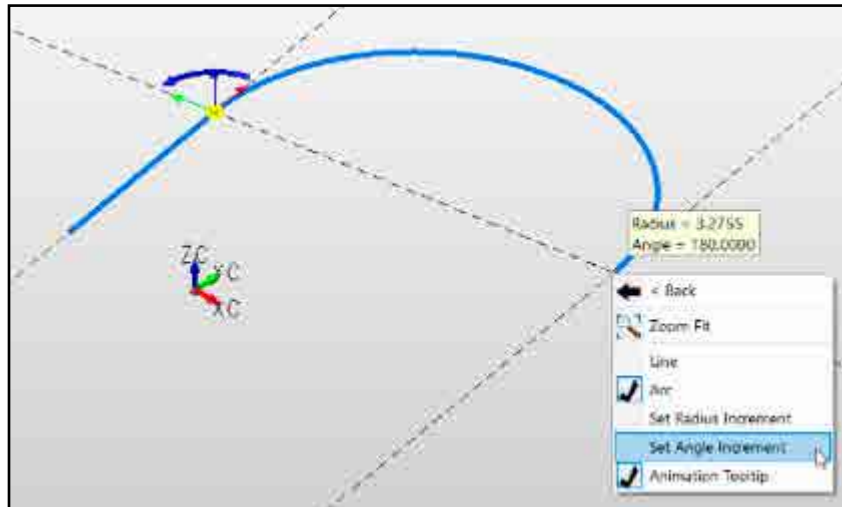
Dialogs are more friendly and efficient for multiple modifications by keeping the last tree item active and removing the repeated selections.



Improved The Sketch Function Usability

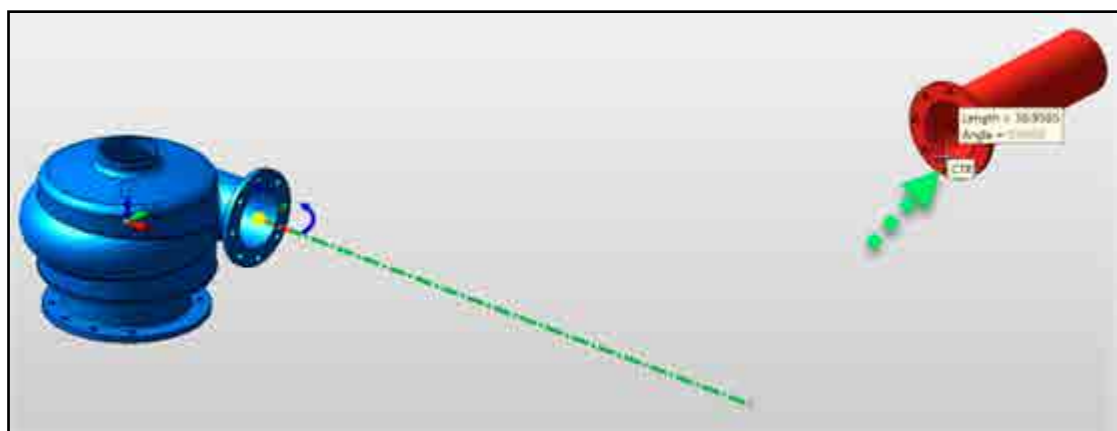
- **Added Set Arc Radius and Angle increments**

The context menu shows the new settings in Arc mode for incremental values used in radius and angle fields to allow users to set their most often used numbers.



- **Locking a DynaHandle Axis**

New capability to lock the Sketch DynaHandle for one move allows snapping to an X, Y, or Z position of other entities.



Improved Composite Functions

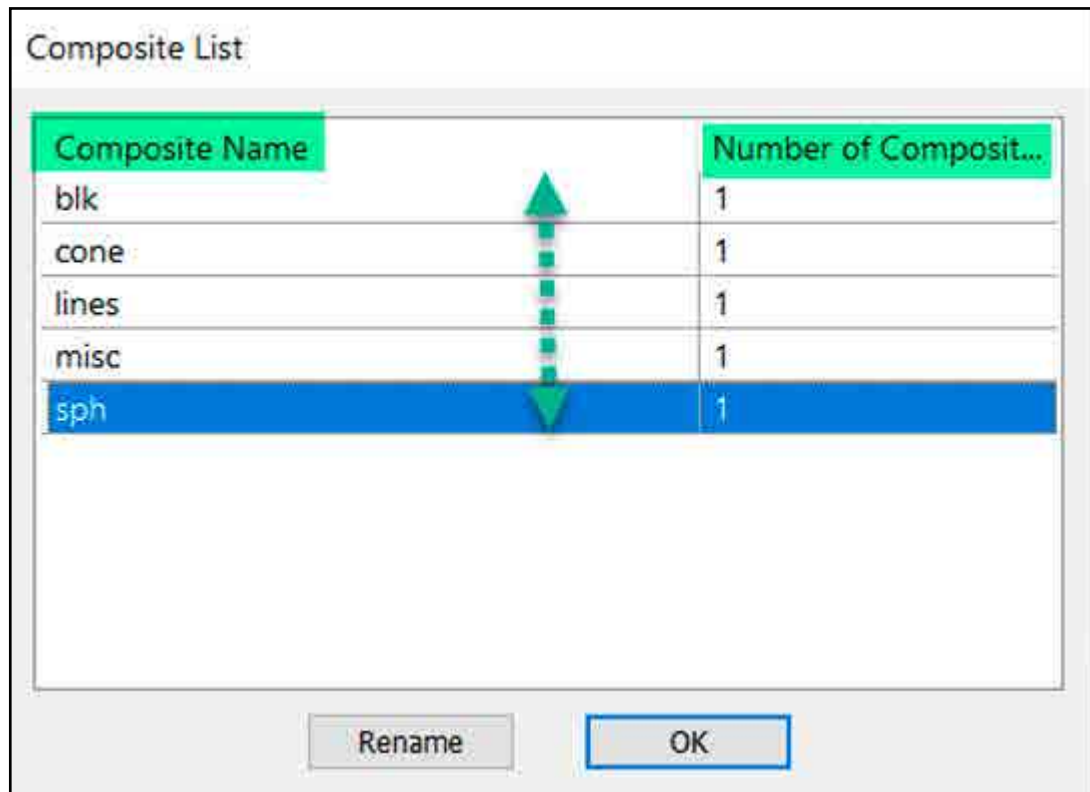
Improved user experience and eliminate confusion for new users

- **The Composite> Make function only executes once**

This change removes the confusion caused by the prompt.

- **Sortable Composite List**

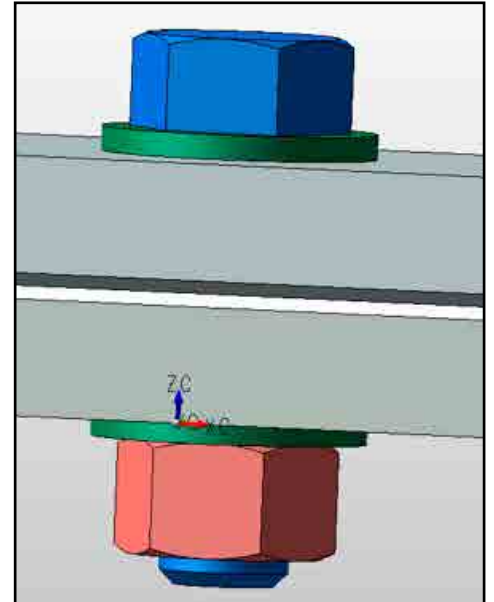
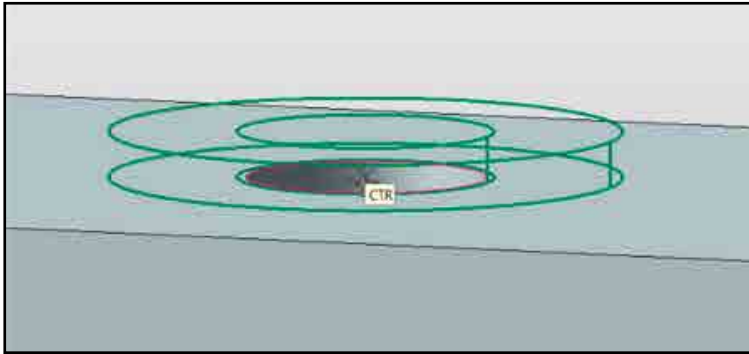
The list can be sorted by the user both alphabetically or manually.



More Consistent Placement of Washers

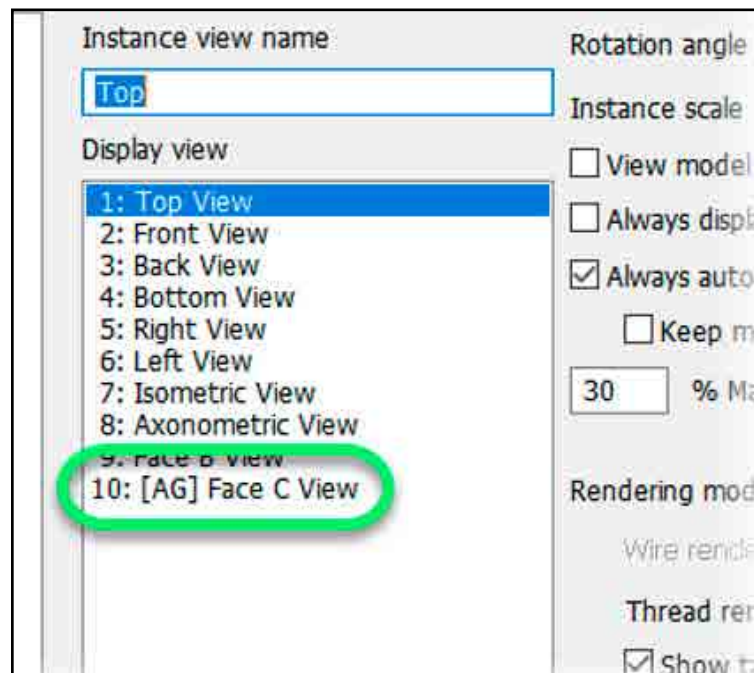
- Washers use the same bottom base point as other Fasteners

This default bottom base point allows for easier and faster stacking of fasteners through a hole.



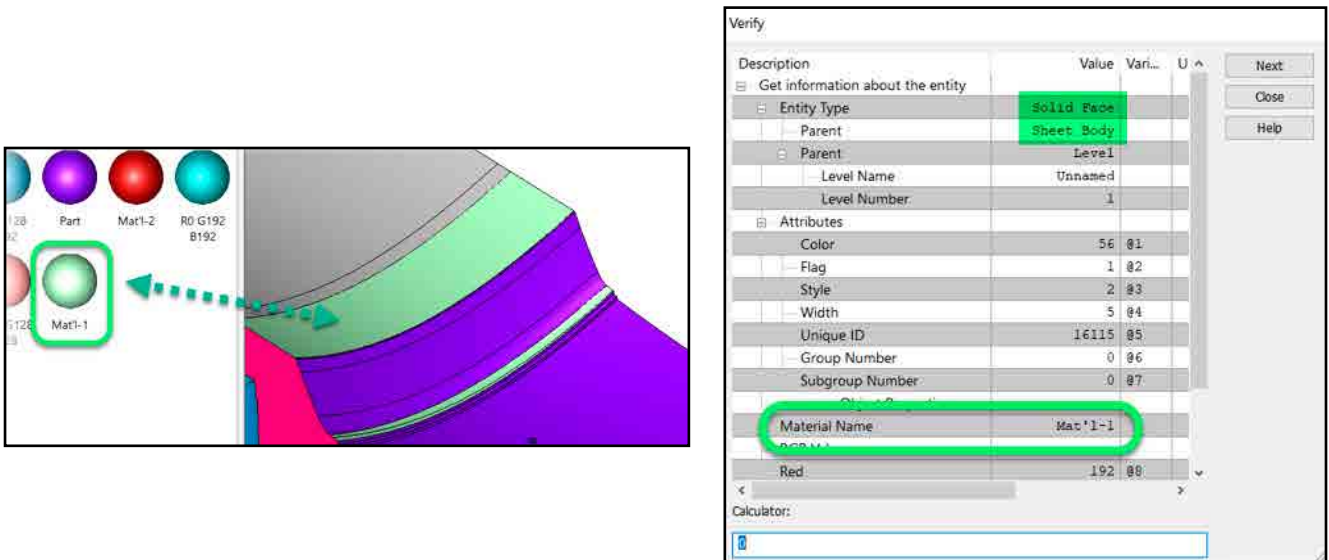
- Identifying Associated Views for Instances

The new prefix [AG] appears on associated views in the Instance creation view list in the dialogs. This new feature provides a quick way for users to identify Associated Views, which will change as their defining geometry is modified.



- **Improvement to Unstitched Faces using Materials**

Unstitched faces from a solid migrate their Material Names and RGB properties.



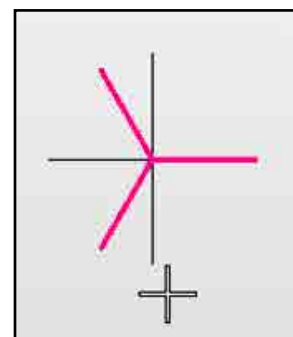
- **Performance Improvement for True Type Fonts**

New graphic updated improved the zooming, panning and rotating display of True Type fonts by 7 times over last release. This performance improved made an Application Options setting obsolete and was removed. The True Type fonts now are displayed without simplification.



- **Head -On Views Direction Arrow Selection**

The direction arrows are clearly identified and selectable when shown in a head-on view. The arrows display with either 4 (inward) or 3 (outward) prongs to aid user identify direction choices.



- **New Native Formats**

KeyCreator 2023 Max product level supports reading:

- o Catia V6 3DXML (.3dxml)
- o JT (.JT) mesh file types
- o Rhino (.3dm)

- **Updated Formats**

File imports into KeyCreator 2023 SP0 have updated these nine formats to support the latest versions.

Spatial ACIS (SAT & SAB)

Read extended to R2022

Dassault CATIA V5

Read & write geometry extended to 2022

Read drawings extended to 2022

Dassault CATIA V6

Read extended to R2021x

PTC Creo, Pro/E

Read geometry extended to V9.0

Read drawings extended to V9.0

Autodesk Inventor

Read extended to 2023

Siemens NX

Read geometry extended to NX2007

Read drawings extended to NX2019, NX2027

Siemens Parasolid (X_T)

Read & write extended to 34.0

Dassault SolidWorks

Read geometry extended to 2022

Read PMI extended to 2022

Siemens Solid Edge

Read extended to 2022

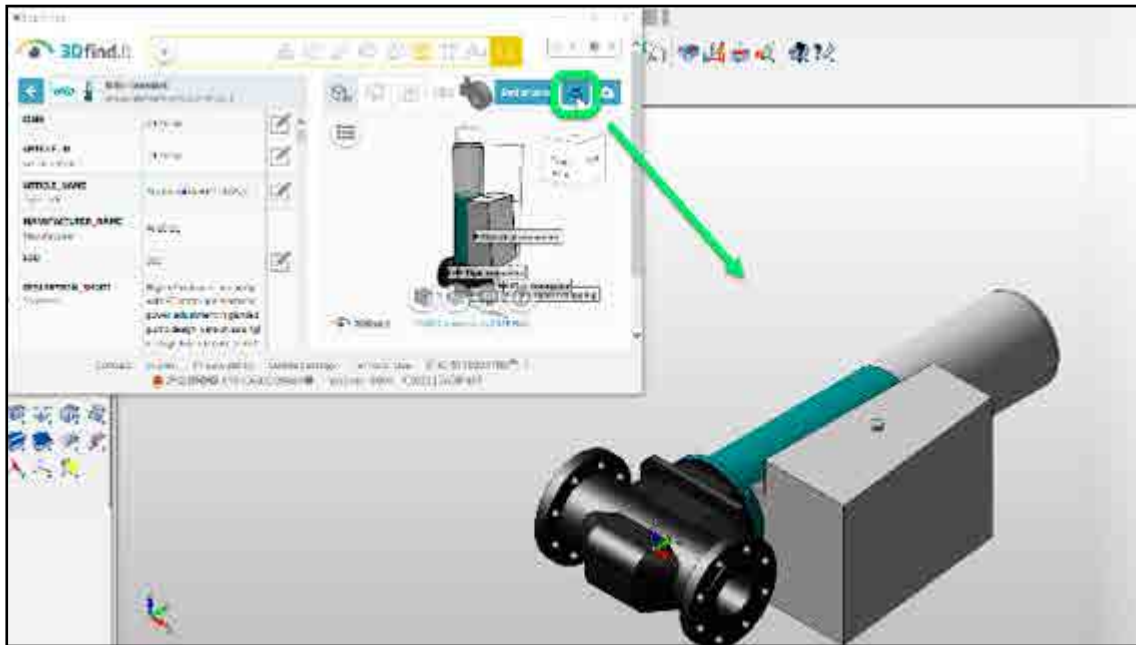
Read drawings extended to 2022

Solution Partners

- **3DfindIt from CADENAS GmbH**

CADENAS develops the parts and components catalog 3Dfindit.com which can be accessed from an integration included in KeyCreator Pro. The 3DfindIt provides direct access to 2D & 3D geometry from CADENAS industrial web catalogs. Search by:

- o Catalogs
- o Existing 3D geometry
- o Photos & Sketches
- o Filtered Searches



Kubotek Kosmos

2 Mount Royal Ave. Suite 500, Marlborough, MA 01752

Phone: 800-372-3872

www.KubotekKosmos.com

sales@KubotekKosmos.com

