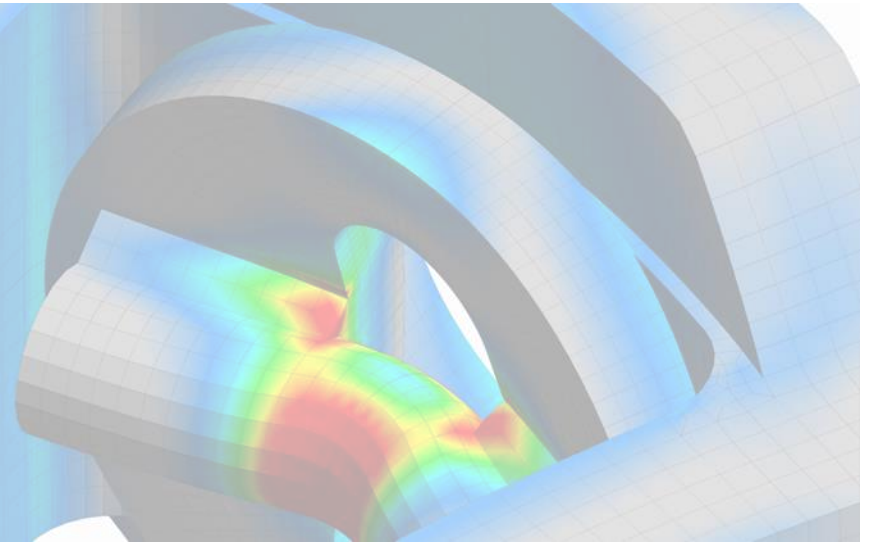


Siemens PLM Software  
**FEMAP**

Version 11.2  
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# What's New in Femap v11.2

A Seminar for Femap and NX Nastran Users

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FINITE ELEMENT ANALYSIS  
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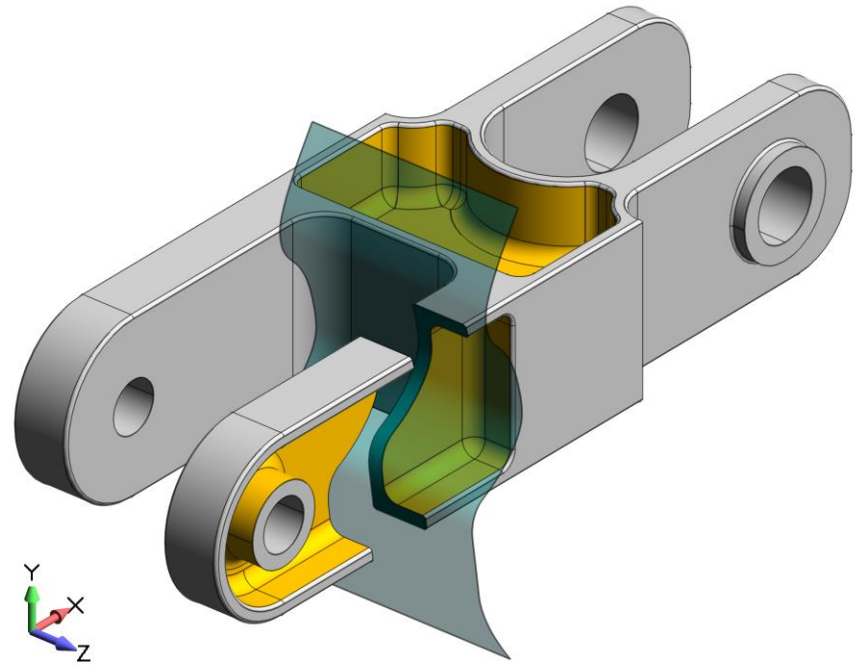
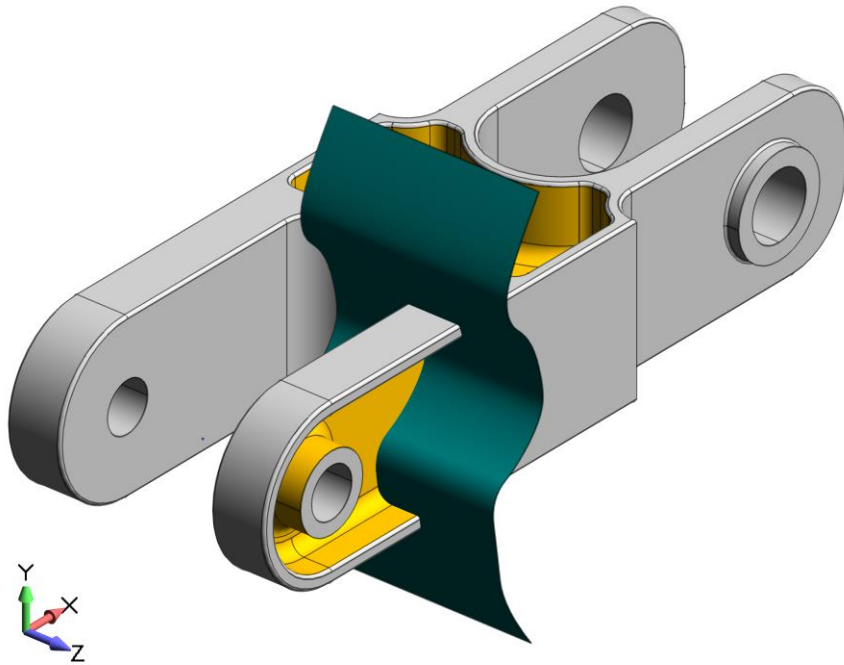
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## 1. GEOMETRY TOOLS

### 1.1 GEOMETRY > SOLID > SLICE

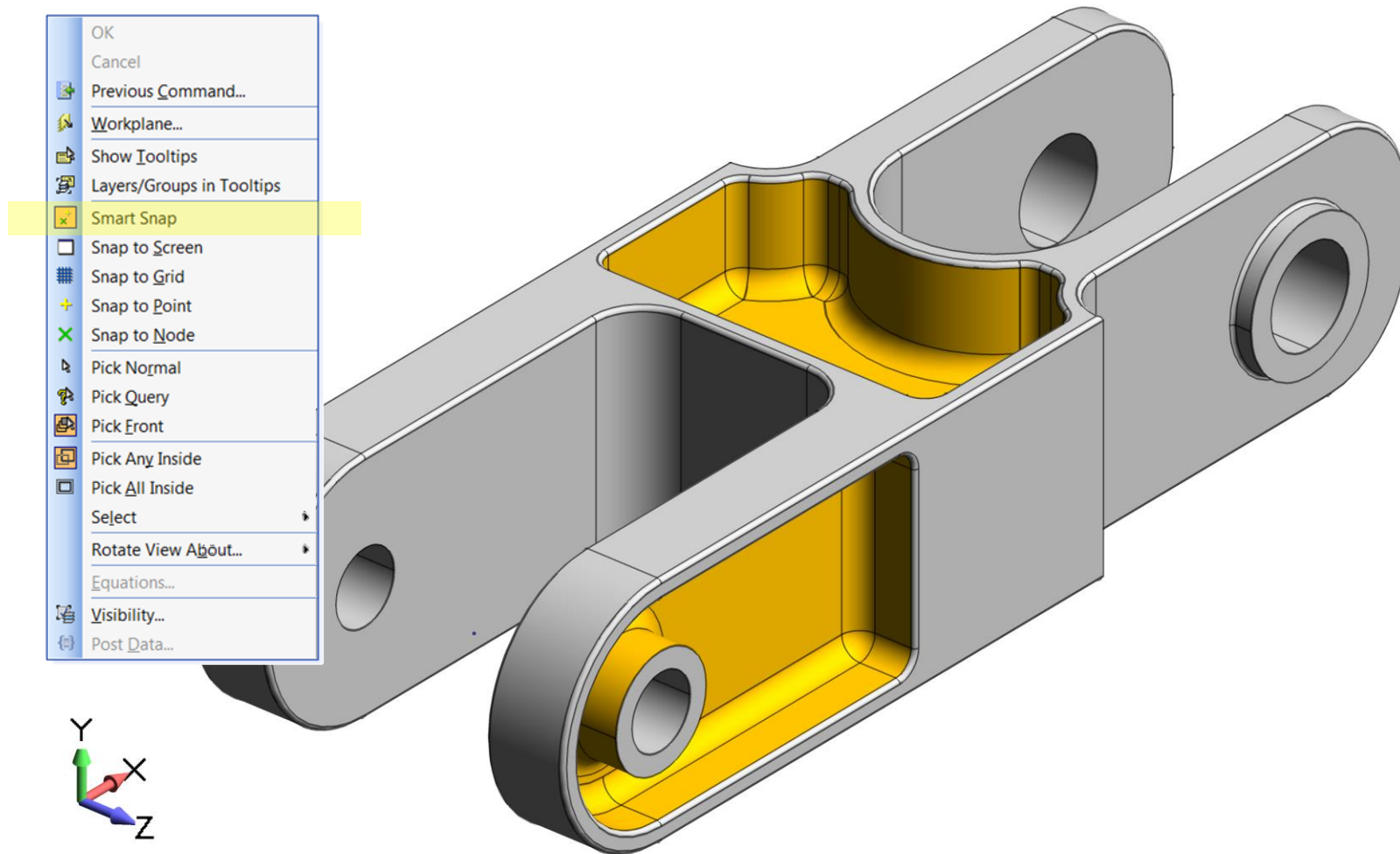
You can now use curves and surfaces to slice through solids. This is useful when you don't want to slice all the way through a solid or for sectioning off a piece of a solid with a curved face.



## 2. PREPROCESSING

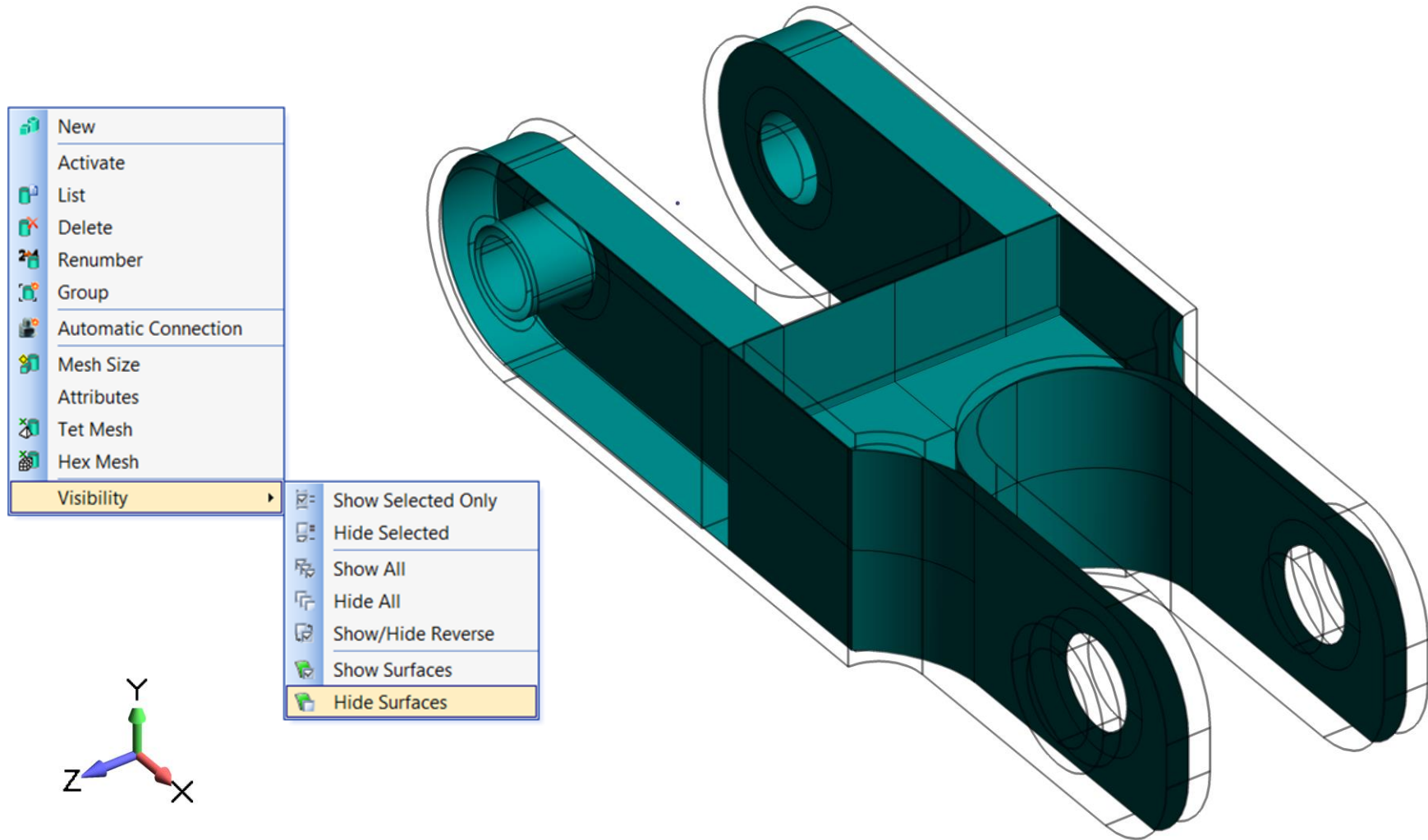
### 2.1 SMART SNAP

A new “snap-to” option that will snap to the nearest node, point, midpoint of a curve, or center point of an arc based on the proximity to cursor.



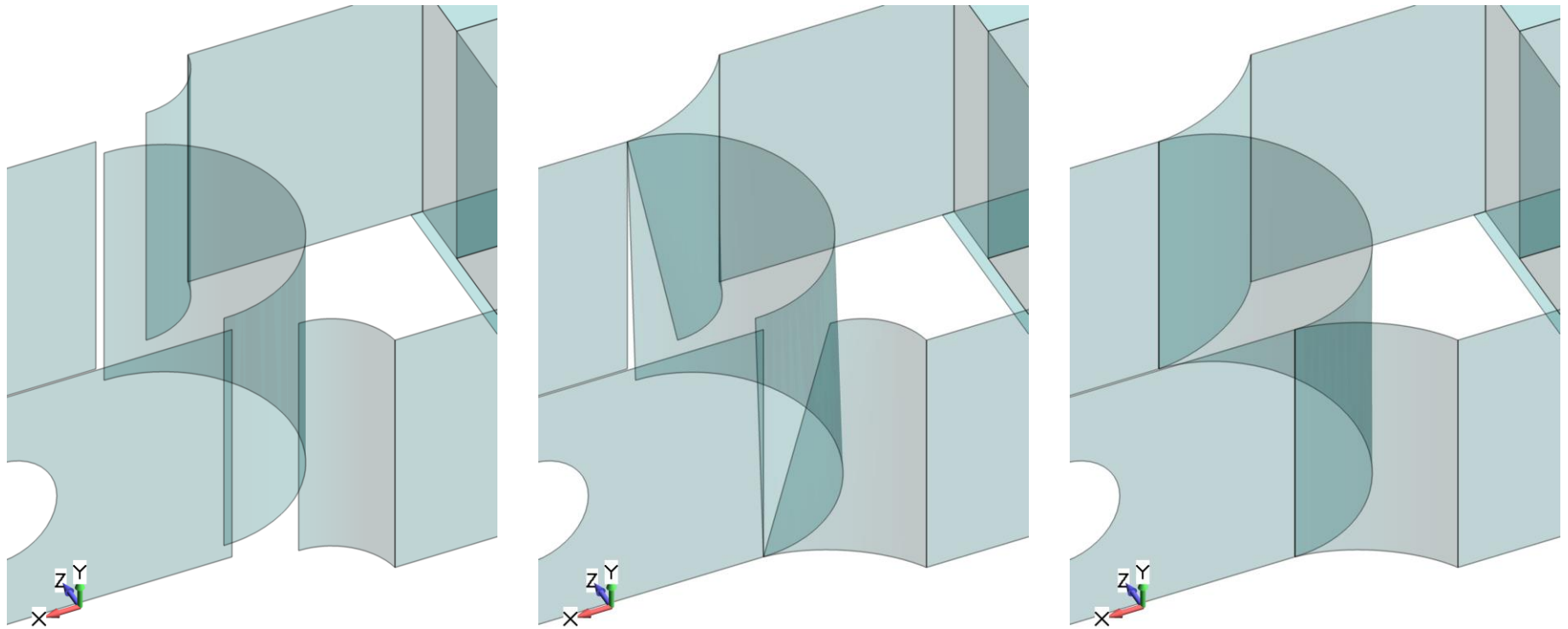
## 2.2 HIDE SURFACES

From the “Visibility” options for a solid, the user can now choose to hide surfaces. This is very useful for working on a midsurface model while referencing the original body solid.



## 2.3 PROJECT/MOVE POINT

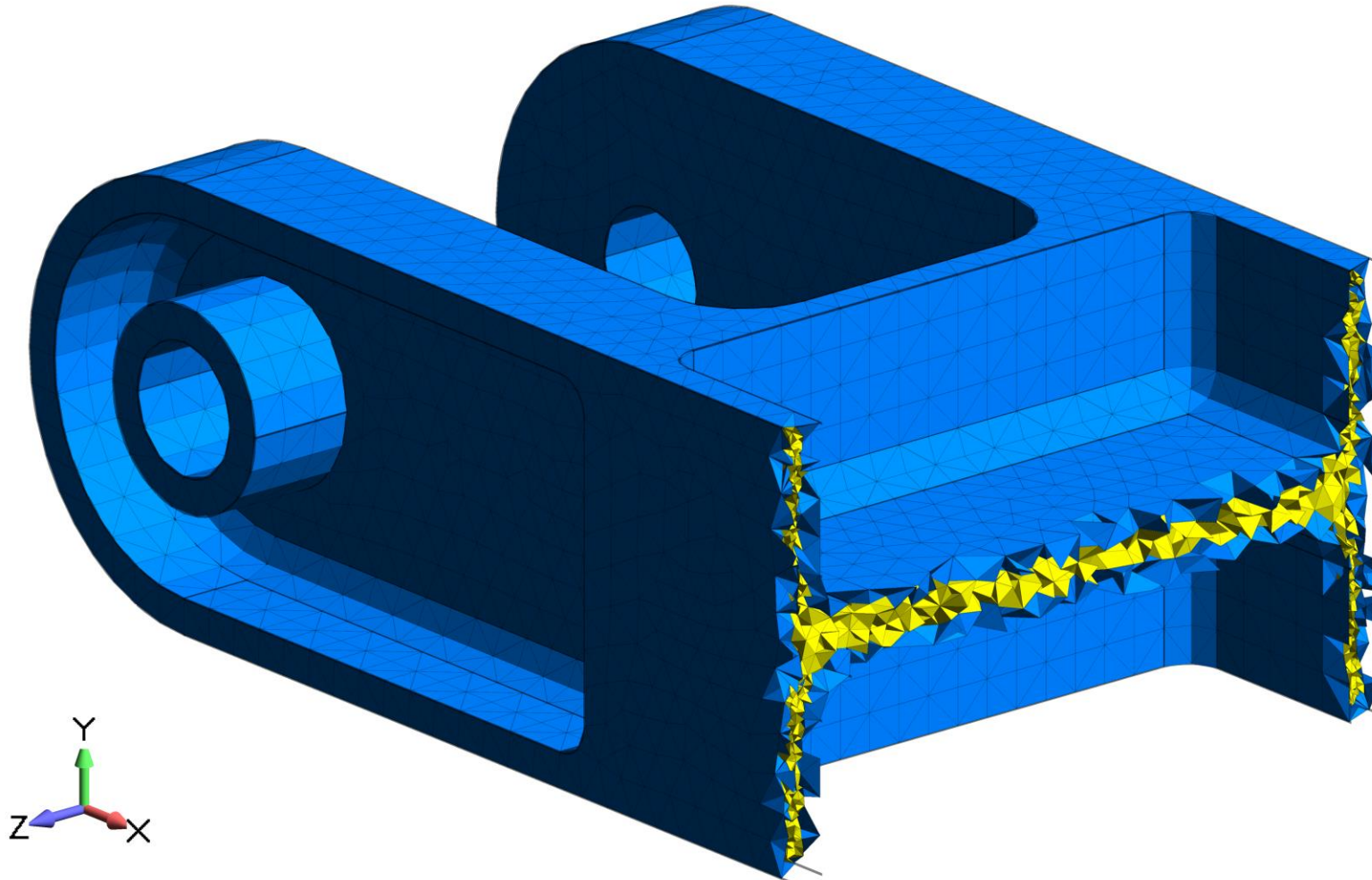
This allows the user to select a final location, and then select a point to move. It will move the point, modifying the underlying geometry, and automatically update the mesh. This is ideal for closing gaps or fixing misalignment with midsurfaces.



### 3. MESHING

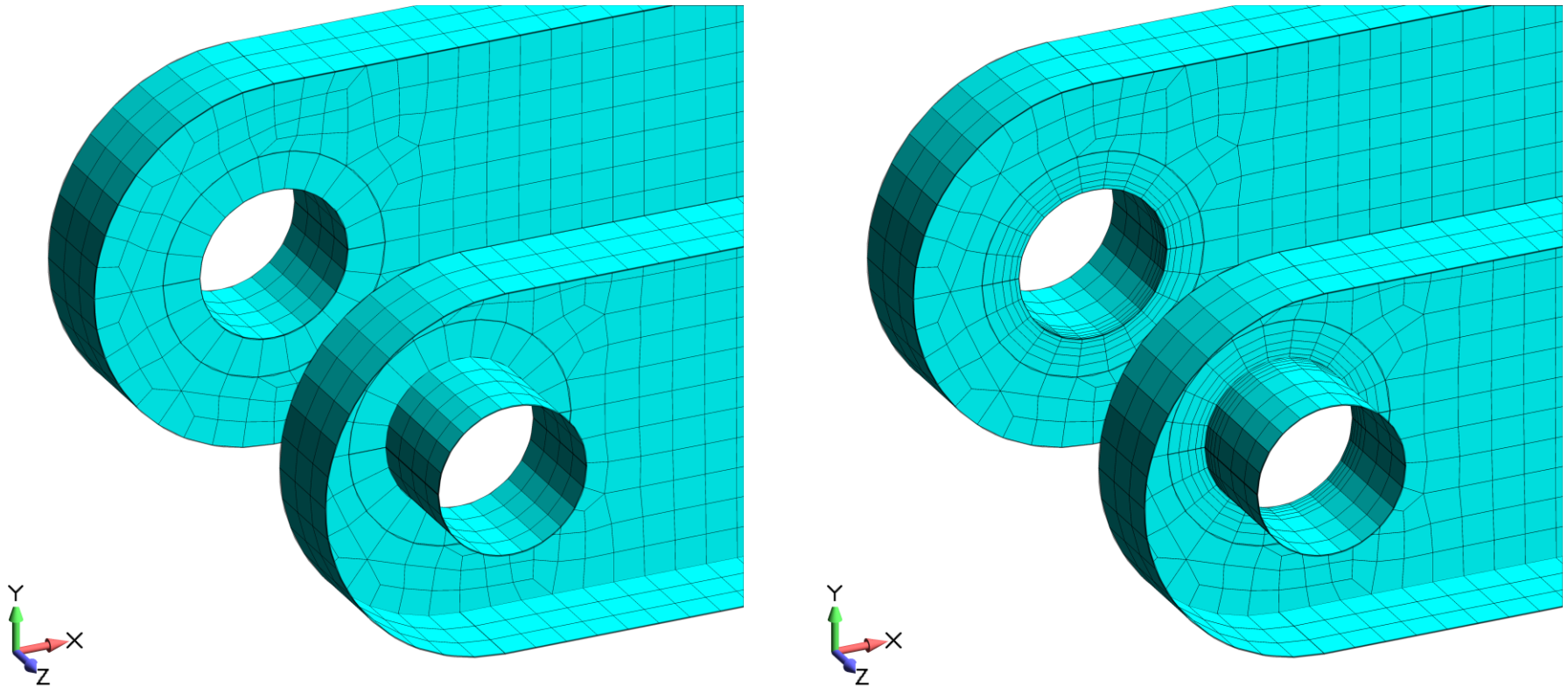
#### 3.1 MESH > GEOMETRY > SOLIDS

The tet mesher now allows for more elements through-thickness.



### 3.2 MESH > EDITING > EDGE SPLIT

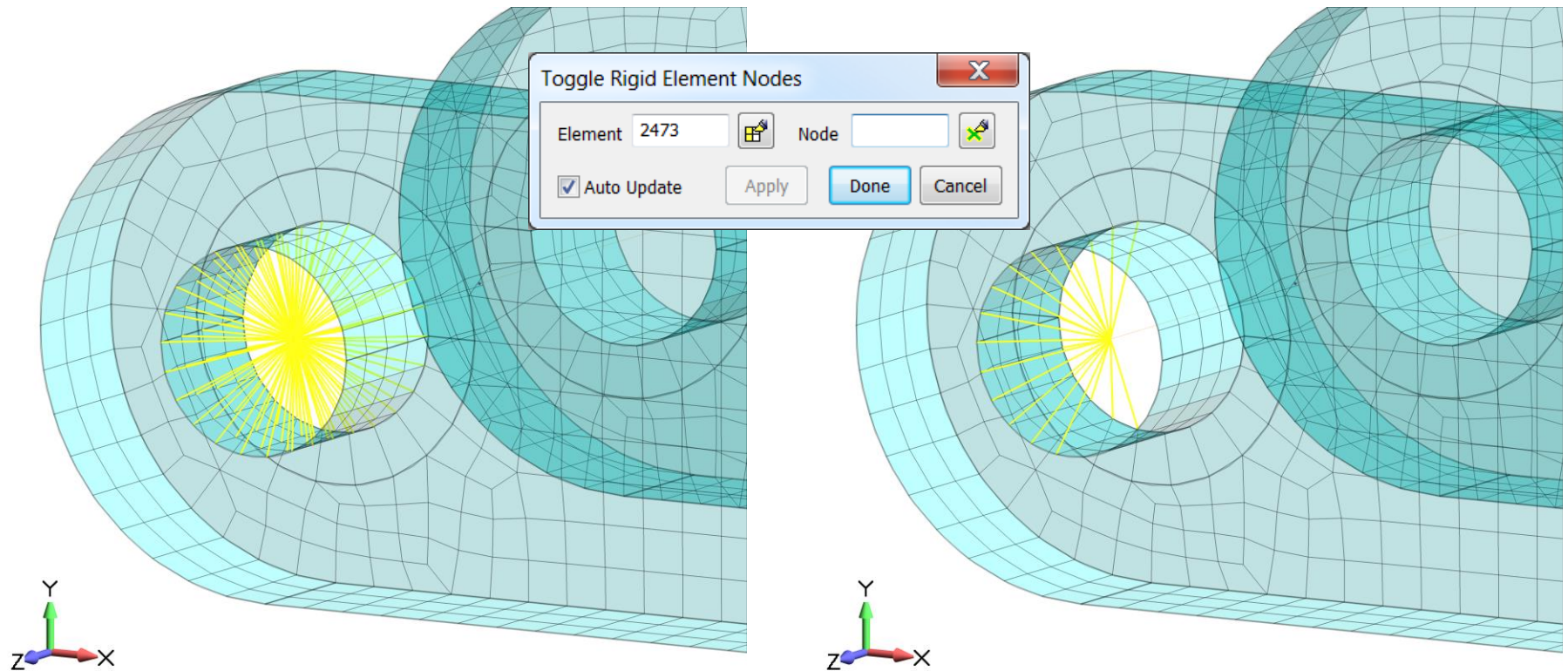
This command now offers more control when splitting elements.





### 3.3 MESH > EDITING > RIGID CONNECTIVITY

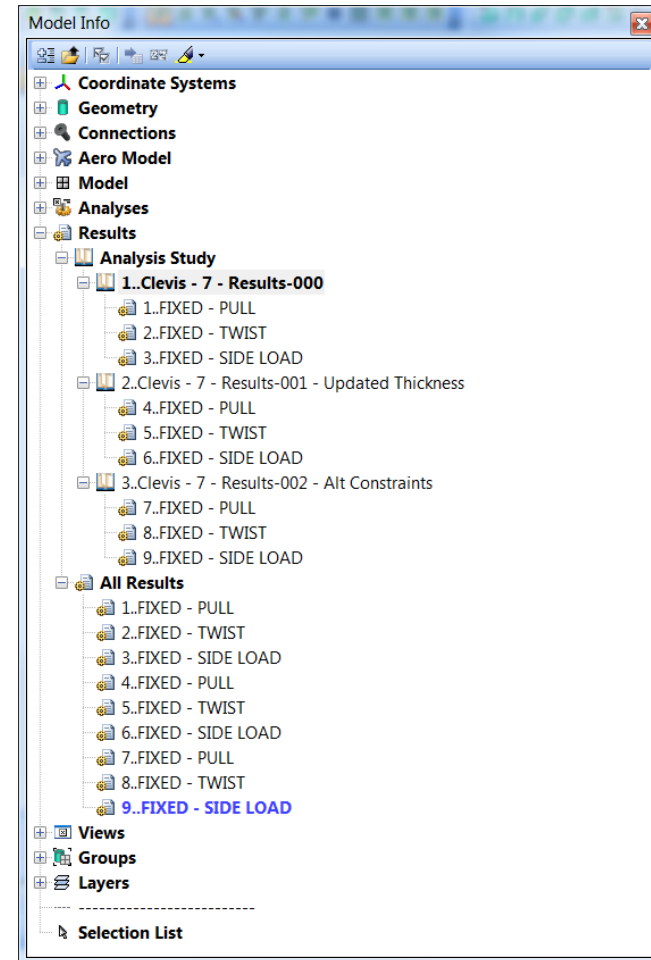
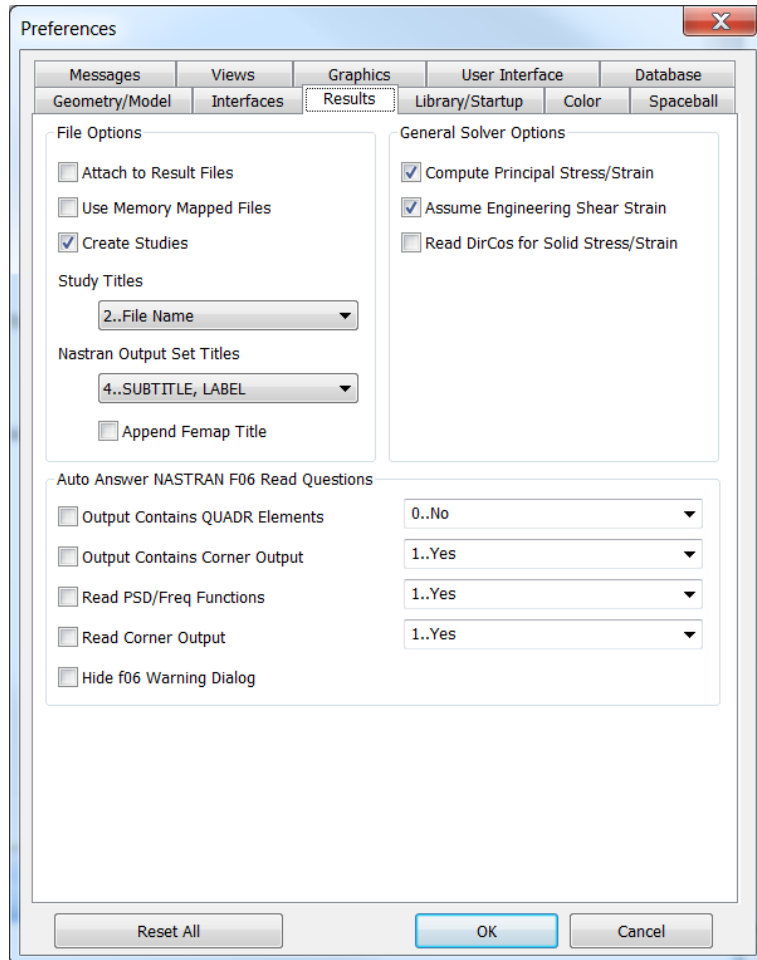
This is a fantastic tool for quickly updating the nodes of RBEs. Rather than **Modify > Edit > Element**, you can use **Mesh > Editing > Rigid Connectivity** to add and remove nodes on-the-fly.



## 4. POSTPROCESSING

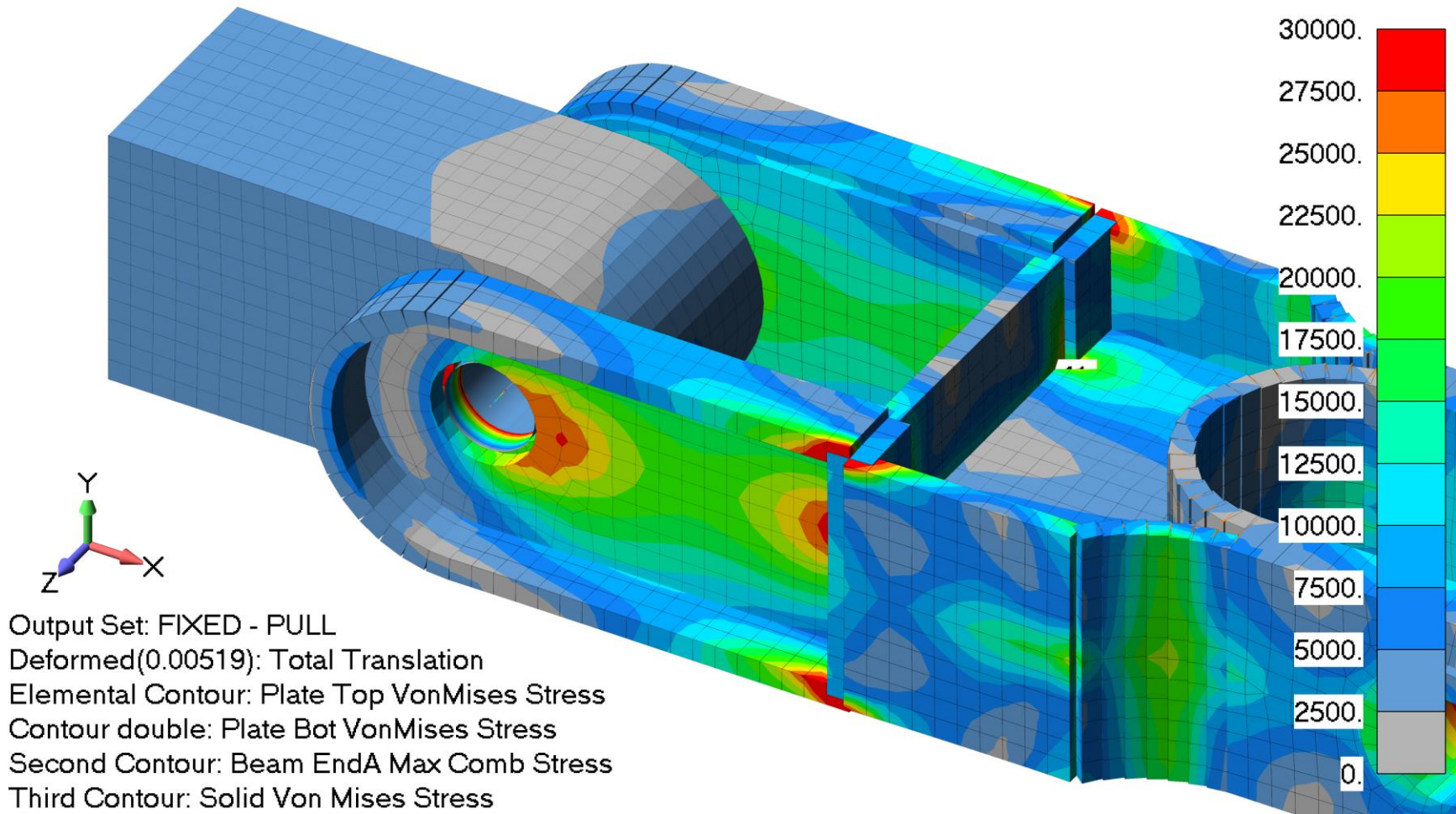
### 4.1 ANALYSIS STUDIES

You can use Analysis Studies to group your output sets for better organization and data processing.



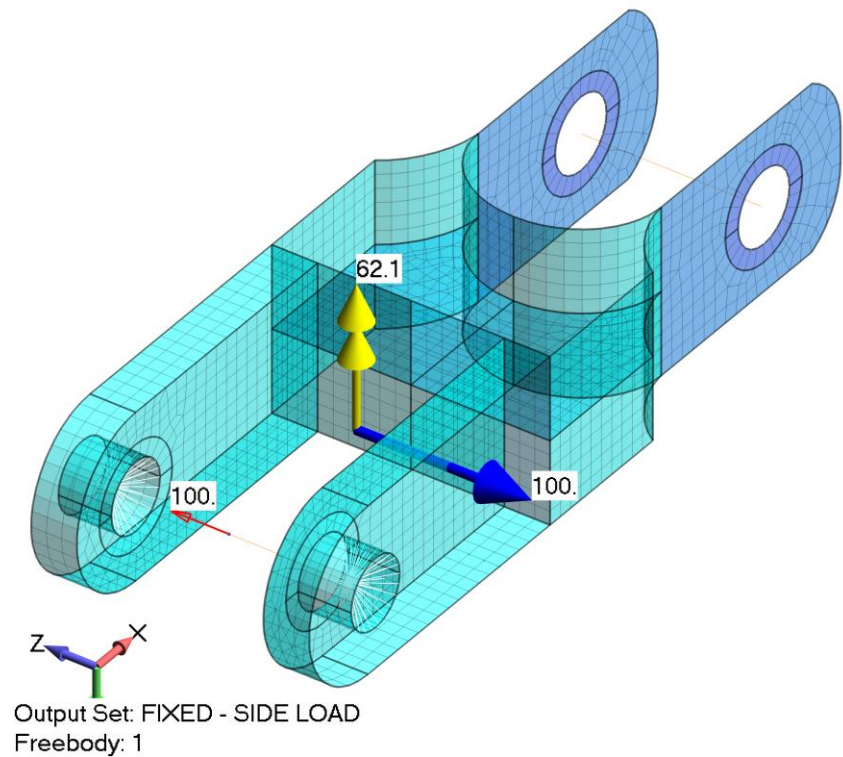
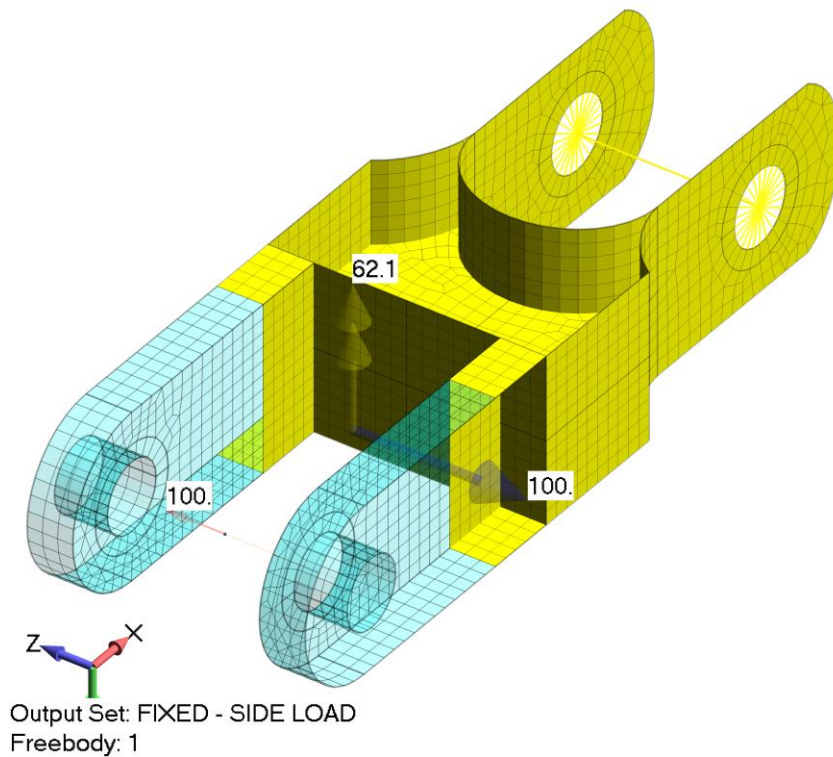
## 4.2 ELEMENT CONTOUR PLOTS

Now you can contour beam, plate and solid element stresses at the same time.



### 4.3 FREEBODY SECTION CUTS

There is a new way to create Freebody Diagrams. Define a cutting plane and Femap will automatically select nodes and elements for BD with section cuts. Additionally, the FBD toolbox has been updated with more user-friendly toggles for Total Summation and Nodal vectors.



## 5. GRAPHICS

### 5.1 ELEMENT COORDINATE SYSTEM DISPLAY

Coordinate system display now supported for plate elements. This falls into the “hey, that’s kinda cool” category...

