

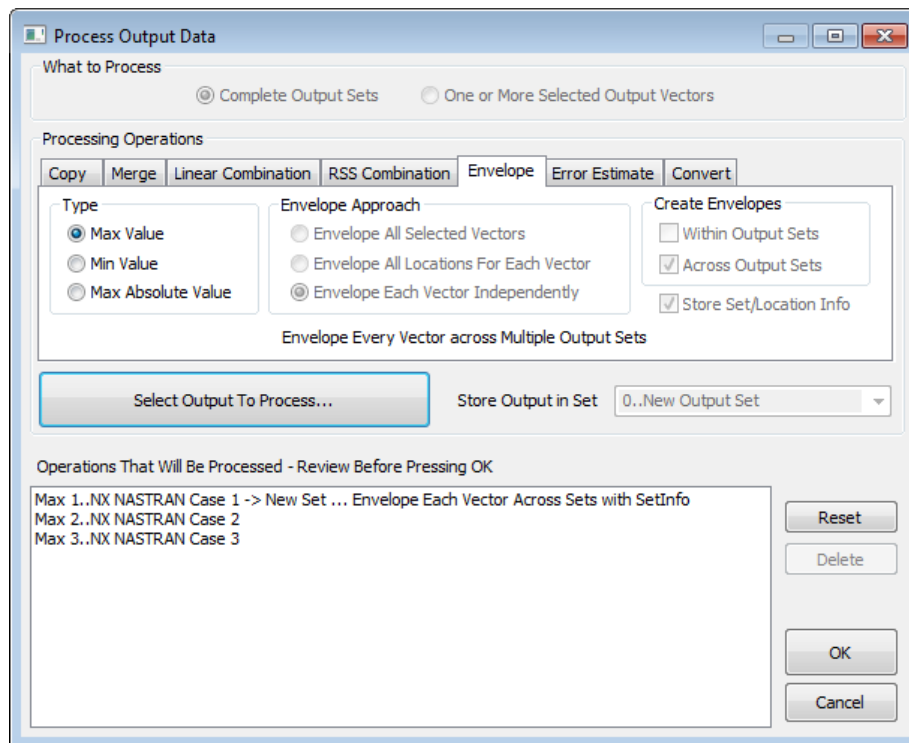
## Femap Tips and Tricks: Results Enveloping

How can you easily envelope results from several load cases into one single output set that contains a collection of all the highest stresses?

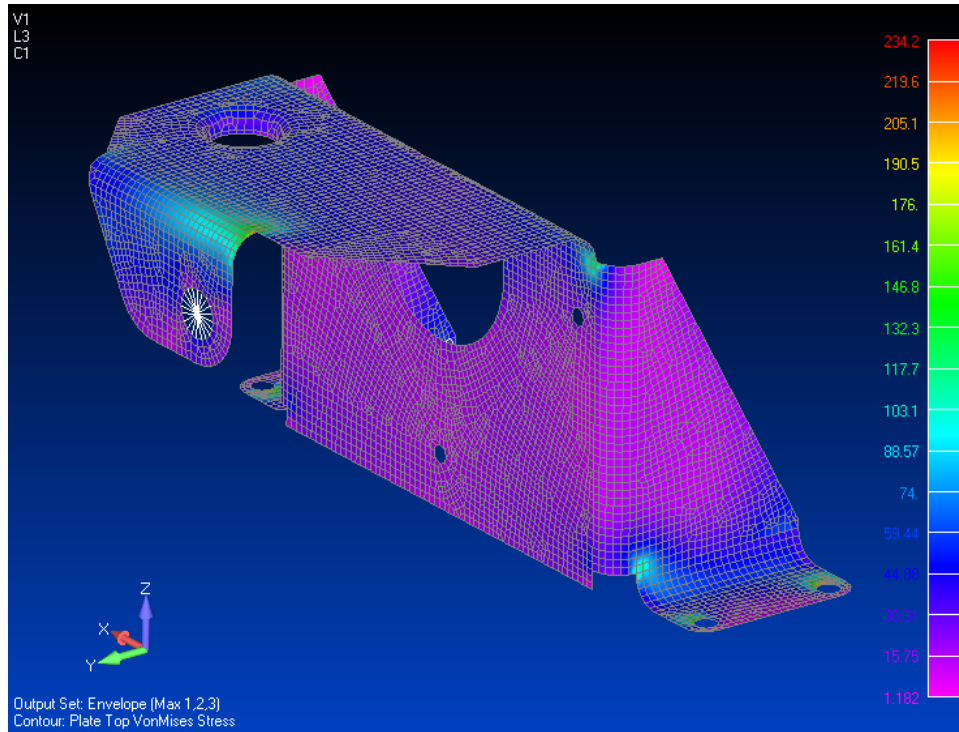
Results enveloping is the fastest and easiest way to scan through large amounts of results data to find the worst case, and present this information on one single plot. For multiple load cases, Femap can scan through each and assemble another output set that includes all of the highest stresses for all elements and nodes. This assembled results case can be viewed just like any other results case.

In a model where you have several different load cases, you can create a worst case output set by selecting **Model | Output | Process** in the menu and picking the **Envelope** tab in the *Process Output Data* dialog.

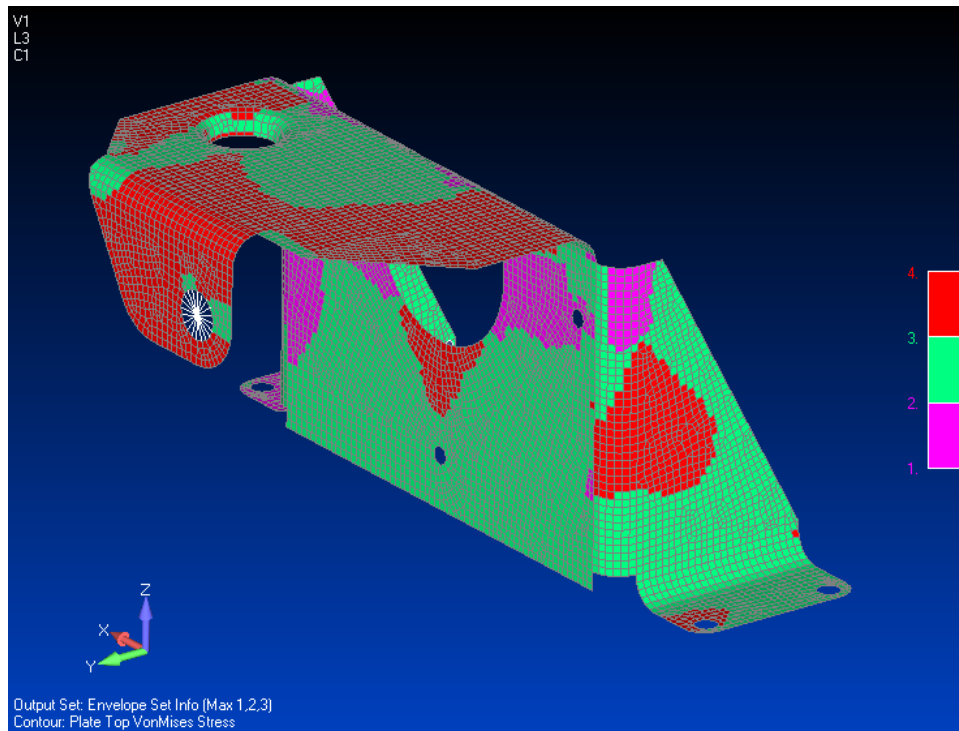
Then you can set the *Type* of data you want to view, for example **Max Value**, and click the **Select Output to Process...** button. Here you see all of the output sets available so we can select the ones you want and click **OK** to continue.



Now you can view the all the highest stresses from all of the load cases in one view by selecting the **Envelope** output set.



You can also view a criteria plot of each load case set ID on the elements, to see which load case contributes the worst stress, by selecting the **Envelope Set Info** output set.



Watch the video of this Femap tip on [YouTube](#).