Global Bend Modeling

This tutorial walks you through a mode for use the Global Bend command to stretch solid.

Table of Contents

1. Step 1: Global Bend - How to stretch a solid

Instead of just bending the solid model, we are going to show how we can modify specific dimensions. In this step we are going to do modification using the **Global Bend** command. Here we will stretch a solid along a linear vector to increase its length by 100 mm without changing the entire model.

NOTE:

With a double click on the exe file you can run the webtraining session. ThinkDesign will be open with the right model to start.

If request to open a file, you can find it in the C:\MyTraining path.

• Open the model Bend_Stretch.e3. The file resides the files folder inside the task folder whereever it is downloaded. This is a STEP file that was saved as an .e3 model and we need to modify it in thinkdesign.

How can we modify the length as well as the slot without remodeling the object?

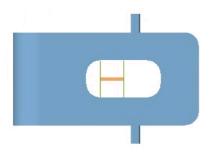
The surface toolbar contains the Global Shape Modeling commands so make sure it is active by right clicking in the gray toolbar area and checking it.

Since there are many ways to perform this change, we will use Global Bend.

- Keep the model in Shaded View.
- Change the orientation to Top View.
- Start the Global Bend command.
- Hit on this sign minus sign next to each of the title to minimize the Seletion List. This will expand all the options of the command.
- Checkthe Associative option in the selection list.

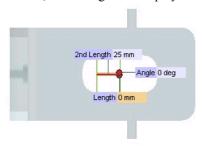
Let's see how this command works.

• Click on Bend Line and then select the horizontal magenta line as shown below.



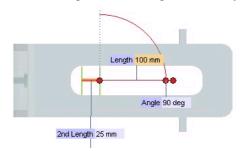
- Select Entities Solid under the Entities to be modified.
- · Select the solid.

Now, thinkdesign will display 3 minidialog boxes for 3 parameters Length, Second Length and Angle.



• Change the values to Angle-90 deg and Length100 mm.

You can also grab the red drag handles to dynamically modify the model.



• Hit OK.

This looks perfect.

In the History Tree, we can see an Associative Global Bend feature and we can change the parameters at any moment by right clicking on it and click on **Redefine Feature**.

