



Altair

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**HyperWorks**

Altair HyperMesh 2019 Tutorials

HM-2080: Modifying Models using solidThinking Inspire

## HM-2080: Modifying Models using solidThinking Inspire

In this tutorial, you will:

- Open geometry in HyperMesh Desktop
- Export your geometry
- Import geometry in solidThinking Inspire
- Modify geometry inside solidThinking Inspire
- Export modified geometry
- Import geometry back into HyperMesh Desktop

The benefit of using solidThinking is that you can apply quick geometry fixes without going back to the CAD software.

### Model Files

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This exercise uses the `rail_extrusion.hm` file, which can be found in the `hm.zip` file. Copy the file(s) from this directory to your working directory.

### Exercise: Modify model using solidThinking

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#### Step 1: Open and view the model file, `rail_extrusion.hm`.

1. Start HyperMesh Desktop.
2. From the menu bar, click **File > Open > Model**.
3. In the **Open Model** dialog, open the `rail_extrusion.hm` model file.

#### Step 2: Export model file.

1. From the menu bar, click **File > Export > Geometry**.
2. From the **File type** list, select **Inspire**.
3. In the **File** field, navigate to your working directory and save the file as `rail_extrusion.stmod`.
4. Click **Export**.
5. Close HyperMesh.

### Step 3: Open and view the model file in solidThinking Inspire.

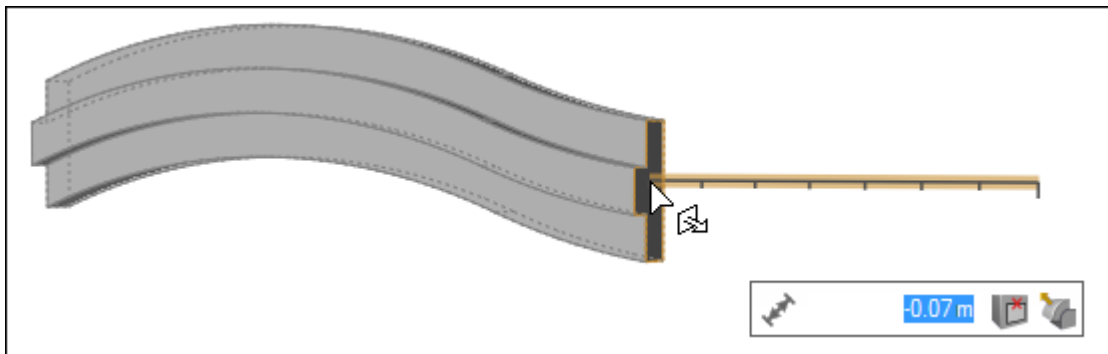
1. Launch solidThinking Inspire.
2. From the menu bar, click **File > Open**.
3. In the **Open File** dialog, navigate to your working directory and open the rail\_extrusion.stmod file.

### Step 4: Edit the Geometry

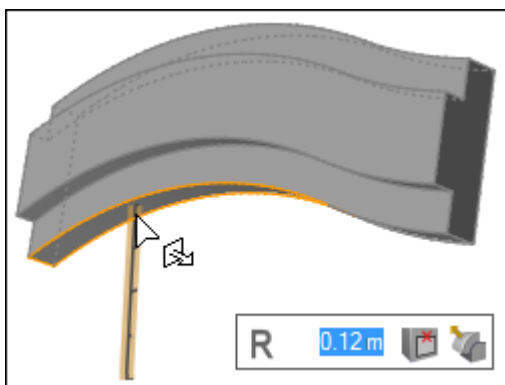
1. Select the **Push/Pull** tool.



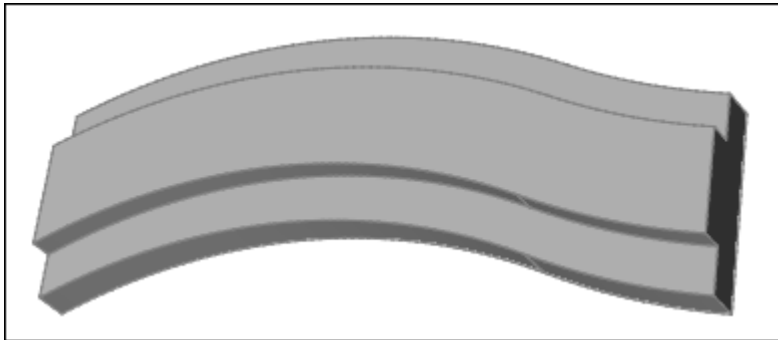
2. To reduce the length of the model, click on one end of the rail and push.



3. To increase the height of the model, click on the bottom of the rail and pull it.




4. Your modified geometry might look something like the example below. It is now ready to be transferred into HyperMesh Desktop.



### Step 5: Export geometry from solidThinking Inspire.

1. From the menu bar, click **File > Save As**.
2. From the **Save as type** list, select **Inspire Model (\*.stmod)**.
3. From the **File name** field, navigate to your working directory and save the file.
4. Exit solidThinking Inspire.

### Step 6: Import geometry in HyperMesh Desktop.

1. Open HyperMesh.
2. From the menu bar, click **File > Import > Geometry**.
3. From the **Import** tab, click .
4. In the **Select Auto Detect file** dialog, navigate to your working directory and open the `rail_extrusion.stmod` file.
5. Click **Import**. The graphics area displays your modified geometry.

### Step 7 (Optional): Save your model as a HyperMesh binary file.

1. From the menu bar, click **File > Save As > Model**.
2. In the **Save Model As** dialog, navigate to your working directory and save the file as a HyperMesh binary file.