

ANSYS WB - Bike Crank - Mesh

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Problem Specification

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Mesh

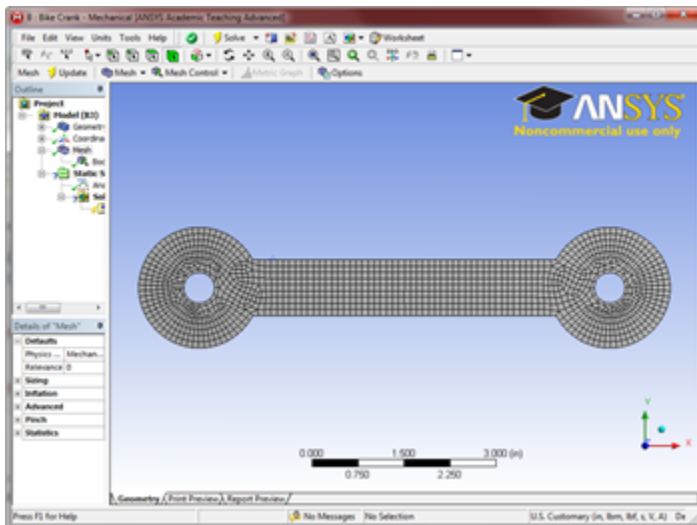
Specify Material

Open ANSYS Mechanical by double clicking **Model**. First, we will tell ANSYS which material we are using for the simulation. Expand **Geometry**, and click **Surface Body** in the *Outline* window. In the *Details* window, select **Material > Assignment > Al 6061-T6**. The material has now been specified.

Body Sizing

In the outline window, click on  **Mesh**. The only thing we will control for this geometry's mesh is the size of the elements. Go to **Mesh Control >**

Sizing to open up the Sizing menu. Select the entire geometry by clicking Body Selection Filter  then clicking on the model. Now click **Geometry > Apply**. Also, change the size of the mesh from default to **0.1 in**. (If the units are not in inches, change them by going to **Units > U.S. Customary (in, lbf, F, S, V, A)**). Now, generate the mesh by clicking **Mesh > Generate Mesh**. The final result should look something like this:



Now that the mesh has been created we can begin specifying the boundary conditions for the simulation.

Continue to [Step 4: Setup \(Physics\)](#)

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