## **ANSYS WB - Bike Crank - Mesh**

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**Problem Specification** 

- 1. Pre-Analysis & Start-Up
- 2. Geometry
- 3. Mesh
- 4. Setup (Physics)
- 5. Solution
- 6. Results
- 7. Verification & Validation

## Mesh

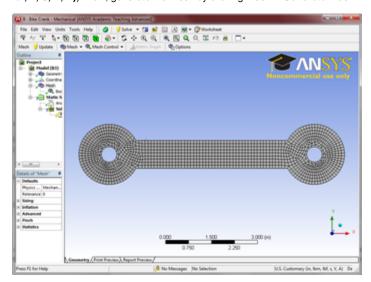
## **Specify Material**

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 > AI 6061-T6*. The material has now been specified.

## **Body Sizing**

In the outline window, click on Mesh Control > . 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, Ibm, Ibf, 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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