## **Bike Crank AIM- Numerical Results**

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**Problem Specification** 

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

Comments

## **Numerical Results**

The following video shows how to plot the deformed shape and use it to check if the displacement constraints have been applied correctly.

Summary of steps in the above video:

- 1. In the Results main window, under the Objects tab, Click Add near "Results" Click on "CONTOUR"
- 2. Add the body of the crank using the body select tool
- 3. Under "Variable", select "Displacement Magnitude" Click Generate and analyze the results of the contour map

## Sigma\_x Conturs

We next take a look at  $_{\rm x}$  variation in the model.

Summary of steps in the above video:

- 1. Click on ADD next to "Results" and add another "Contour"
- 2. Make sure the the location is specified
- 3. Under "Variable", scroll down to "Stress" and click on "Stress XX" You can also rename the Contour
- 4. Update and analyze results

Go to Step 7: Verification & Validation

Go to all (ANSYS or FLUENT) Learning Modules