ANSYS 11 - Crank Step 1

Problem Specification

- 1. Start-up and preliminary set-up
- 2. Specify element type and constants
- 3. Specify material properties
- 4. Specify geometry
- 5. Mesh geometry
- 6. Specify boundary conditions
- 7. Solve!
- 8. Postprocess the results
- 9. Validate the results

Step 1: Start-up and preliminary set-up

Start ANSYS

Create a folder called crank at a convenient location. We'll use this folder to store files created during the ANSYS session.

Start > All Programs > ANSYS 12.0 > Mechanical APDL Product Launcher

In the window that comes up, enter the location of the folder you just created as your *Working Directory* by browsing to it. All files generated during the ANSYS run will be stored in this directory.

Specify crank as your *Job Name*. The job name is the prefix used for all files generated during the ANSYS session. For example, when you perform a save operation in ANSYS, it'll store your work in a file called *crank.db* in your working directory.

For this tutorial, we'll use the default values for the other fields. Click *Run*. This brings up the ANSYS interface. To make best use of screen real estate, move the windows around and resize them so that you approximate this screen arrangement. This way you can read instructions in the browser window and implement them in ANSYS. Note that this tutorial has been formatted to fit in a skinny browser window. If your monitor screen is small, you can use *Alt* +*Tab* keys to conveniently switch between the ANSYS and browser windows (this trick works in Microsoft Windows).

You can resize the text in the browser window to your taste and comfort:

In Internet Explorer, select Menubar > View > Text Size, then choose the appropriate font size.

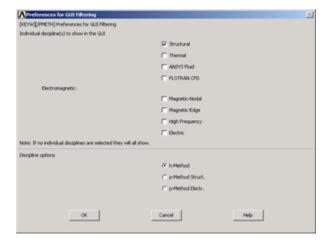
In Mozilla Firefox, select Menubar > View > Zoom.

Set Preferences

As before, we'll more or less work our way down the Main Menu.

Main Menu > Preferences

In the Preferences for GUI Filtering dialog box, click on the box next to Structural so that a tick mark appears in the box. Click OK.



Recall that this is an optional step that customizes the graphical user interface so that only menu options valid for structural problems are made available during the ANSYS session.

Go to Step 2: Specify element type and constants

See and rate the complete Learning Module

Go to all ANSYS Learning Modules