# SolidWorks Simulation Tutorials

To access the following tutorials, open Solidworks and create a new part file. Then go to the-help menu, hover over SolidWorks Simulation then click Tutorials. Under "Tutorials" click "Static" then "Analysis of a Part". The second tutorial can be accessed under "Tutorials" by clicking "Frequency, Buckling and Thermal" then "Frequency Analysis."

Note: The part files can be downloaded from the tutorials.

1. Static Analysis of a Part
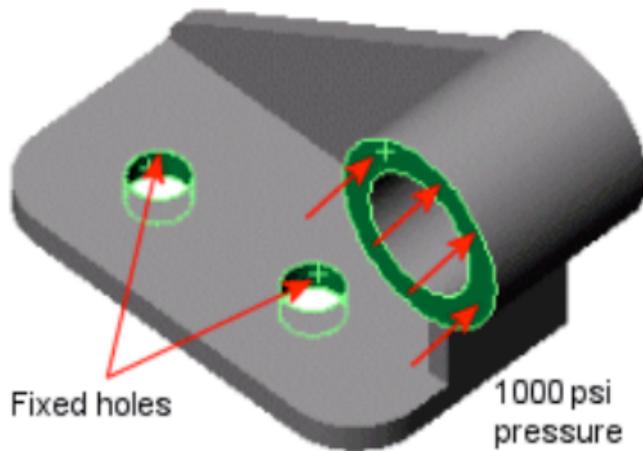
In this lesson, you learn the following:
- Assigning material to the part
- Creating a static analysis study
- Applying restraints and pressure load
- Setting meshing options and meshing the part
- Running the study
- Viewing basic results of static analysis

The bracket, made of Alloy Steel, is fixed at the two holes and loaded with a 1000 psi pressure as shown in the figure.

2. Frequency Analysis

First Mode Shape

Second Mode Shape
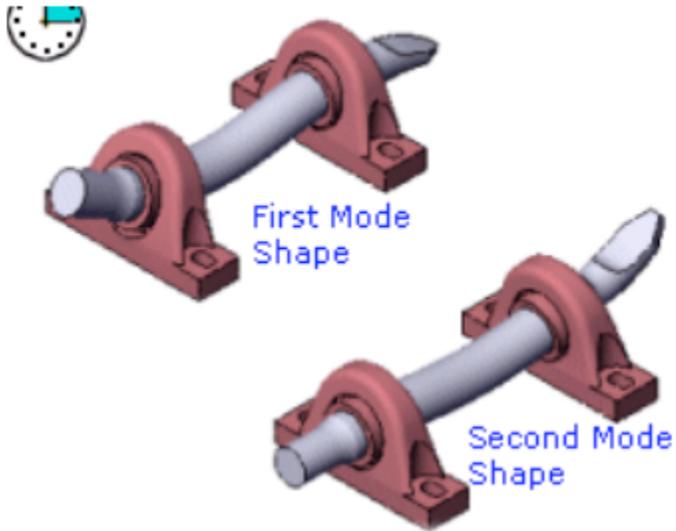
Frequency analysis, also known as modal or dynamic analysis, calculates the resonant (natural) frequencies and the corresponding mode shapes.

In this lesson, you learn the following:

- Creating a frequency analysis study
- Running frequency analysis
- Viewing results of frequency analysis
- Listing mass participation factors
- Evaluating the accuracy of the results