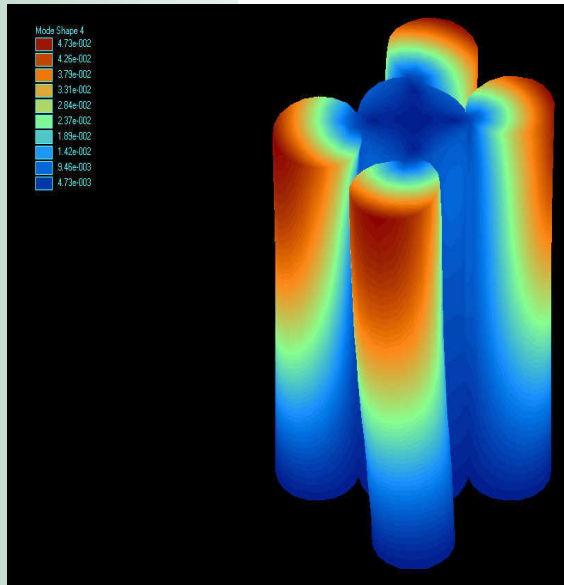


AutoFEA

Buckling & Frequency Analysis Engine



The Frequency Analysis Engine and Buckling Analysis Engine are another group of standard analysis tool you will own with the purchase of any JL Analyzer Package. While many other FEA softwares may offer these features as an add-on option, our consulting experiences have told us that one of the most easily overlooked design failure cause is through the negligence of buckling analysis, therefore we include this capability to be a standard function of every JL Analyzer.

Due to its tedious mathematical calculation, solving for buckling on a complicated structure can often be difficult and time consuming, but by using JL Analyzer Buckling Analysis Engine, you may find this job to be easier than ever.

The Buckling Analysis Engine uses Direct Iteration Method to obtain its solution convergence. The Frequency Analysis

Engine uses Subspace Iteration to solve natural frequency and mode shapes. For novice user, a pre-select standard flags can be sufficient to obtain buckling analysis on any geometry, while advanced options are also offered to experienced users, such as maximum iteration time, convergent tolerance. In addition, buckling analysis engine can also be used along with result from other engines, such as pre-load stiffening and displacement, modification on nodal coordinates based on previous load case, and also stress result from temporal thermal effects.

Once the analysis is completed, buckling result can be viewed quickly and easily through the fully integrated Result Module or saved to an output text file for easy carry. With Buckling and Frequency Analysis Engine, you may study the buckling effect and the stability of the structure without building any prototypes and laboratory tests. Yet through our accurate simulation engine, you may also obtain the equivalent confidence to your designs