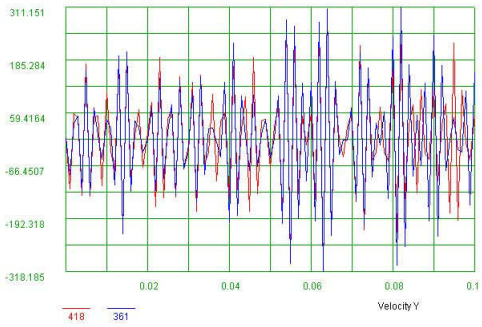
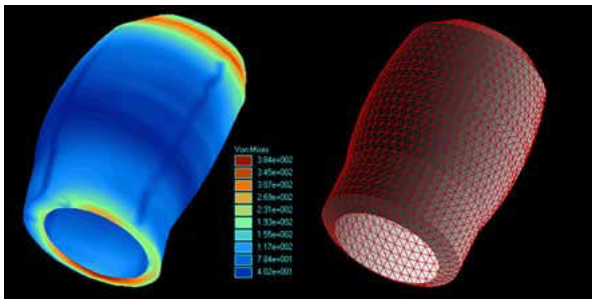
AutoFEA Software

Dynamic Analysis Engine & Dynamic Spectrum Engine

Sometimes, obtaining a conventional stress study of an object in static equilibrium is not enough. One might be interesteds in the structural behavior at the moment of impact, or to perform stress analysis before the entire object enters steady state. For this type of analysis, JL Analyzer brings you the Dynamic Analysis Engine and Response Spectrum Analysis Engine.

The Dynamic Analysis Engine can solve for displacement, velocity and acceleration results from a dynamic loading. Together with the Frequency Analysis Engine, the users can obtain a reasonable dynamic time period for the time length of transient state calculation.



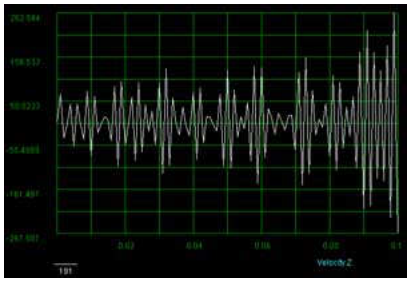


The users can either assign their particular values for the Rayleigh damping formula or use the derfault setting. Once the displacement is obtained, it can also be used to perform and solve for dynamic stress.

The Response Spectrum Analysis Engine is another method that can be used to calculate the stress with a given base excitation motion and damping factor. With the already exist interface with Static Analysis Engine, pre-loading effects such as stiffening and displacement can also be integrated into the calculation to obtain more realistic results.

Time And Money Saver

Dynamic Calculation is a tedious calculation task; finding an appropriate time period for each time step, arriving to the convergence for each equation. Yet it can not be neglected when the issue of impact is of interest. The Dynamic Analysis Engine and Response Spectrum Analysis Engine is designed to bring this solution to you without spending enormouse calculation time. But it offers you more than just higher efficiency, it will also save you time and money from the repetitive constructing and building of prototype tests.



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