## **ROUSH**®

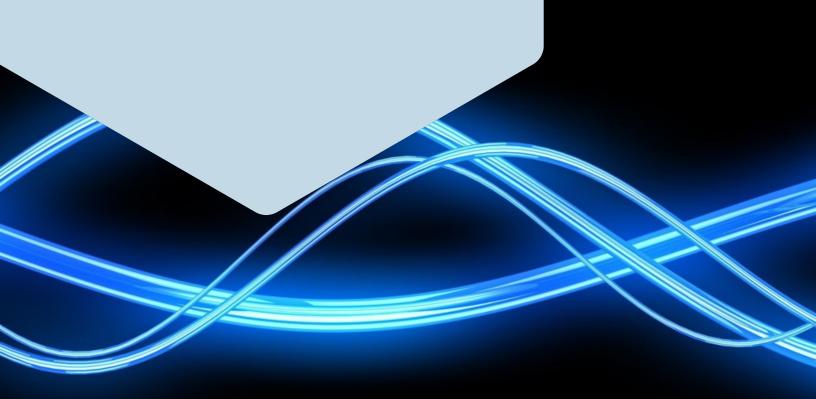
## STRUCTURAL VIBRATION TESTING & ANALYSIS

Roush provides expert operating deflection shape, modal, and transfer path analyses. Each year Roush performs many of these structural vibration-based analyses as either stand-alone projects or as part of larger noise and vibration problem solving efforts. With the ability to perform very high channel count acquisitions (over 100 channels simultaneously), Roush is very capable at solving complex and large-scale vibration problems.

## www.roush.com

We're focused, we're efficient, and we're at our best when we're challenged to think outside the box — critical traits when our customers' success depends on how quickly we can take their visions from the sketchpad to the marketplace.

For more information, please click here.



## USING THE RESULTS FROM STRUCTURAL VIBRATION TESTING, ROUSH CAN:

- Identify and characterize system dynamic response and mode shape behavior
- Determine the equivalent stiffness of attachment points, frames, and vehicle bodies
- Pinpoint key/sensitive noise and vibration transfer paths and estimate input forces
- Develop high fidelity images/animations highlighting areas of high vibration
- Measure the moment-of-inertia and center-of-gravity properties of various systems
- Identify correlations between structural vibrations and objectionable noises
- Develop vibration reduction solutions
- Correlate CAE models to test results

Roush can also provide expert analysis using MSC/NX Nastran, Abaqus, AMLS, and Adams CAE tools. Using these tools in parallel with physical testing can significantly accelerate root cause analysis and reduce solution development time.

