

We have one goal — improving the noise and vibration quality of our customers' products. Roush delivers innovative, effective noise and vibration control solutions. By combining advanced analysis capabilities, comprehensive engineering services, and state-of-the-art facilities, Roush has become a proven partner in identifying and resolving challenging noise and vibration issues. Backed by the diverse capabilities of the Roush family of companies, we are uniquely equipped to provide turnkey noise and vibration solutions.

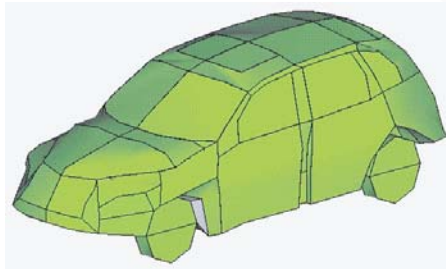
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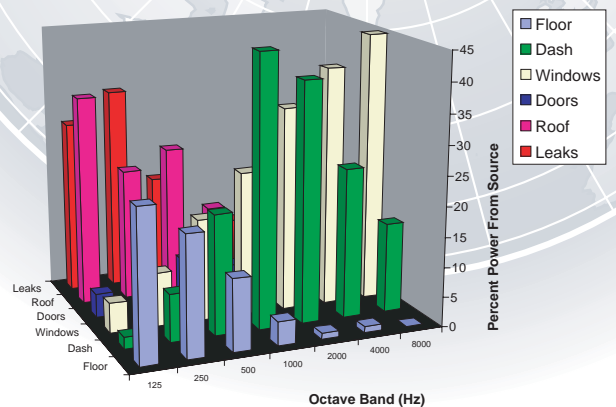
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SEA Modeling for Acoustic Prediction

- Roush performs noise and vibration (NVH) product design and development using Statistical Energy Analysis (SEA).
- This powerful tool allows us to guide product development decisions at an early stage in the design.
- SEA allows our engineers to make analytical estimates of a product/treatment's noise and vibration performance before any hardware has been built.
- Targets can be set and treatments designed in advance.
- SEA output of Power Flow data allows the identification of the key noise sources and paths. This also provides valuable insight into which parts of the design could benefit from noise treatment.



Sedan SEA Model Acoustic Power Flow Into Driver's Acoustic Space From Various Sources



Sedan SEA Model Results, Driver's Right Ear Response
Fig 4: Study of Various Design Changes

