## ROUSH

## TUNED MASS DAMPER PRODUCTS

Roush manufactures many types of advanced materials and finished products employed in real-world noise, vibration and harshness (NVH) control applications.

Roush offers engineering problem solving abilities and vast experience in the area of noise and vibration control. These problemsolving capabilities partnered with our lowcost manufacturing experience (over 10 years of offshore manufacturing history), bring a unique skill set to the market.

## 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 <u>click here</u>.

With over 30 years of direct problemsolving experience, for virtually every industry, comes a confidence that we can solve your noise and vibration challenge; and bring the product to production at a very competitive price.





Tuned Mass Dampers (TMD) are one of these engineered products currently in production with applications in motor vehicles and consumer products such as:

- Steering Wheel Dampers
- Powertrain Bending Dampers
- Half Shaft Dampers
- Exhaust Dampers
- Frame and Body Dampers
- Axle Dampers
- Sporting Goods Dampers

We welcome the opportunity to meet with you to discuss your NVH needs and make recommendations that will add value to your product.



## DEVELOPMENT AND PROTOTYPE CAPABILITIES

Utilizing our database of Viscoelastic Materials and our custom TMD development software, we can accurately predict the performance of the damper at any operating temperature prior to making the first prototype.





This process allows for faster prototype turnaround (2 weeks or less). In addition, it allows for optimization of weight vs. performance prior to prototyping.

If post launch changes are made to the vehicle affecting the tuning frequency of the damper, we can use this process to reduce lead-time, obsolesce costs and piece price.

In addition to our extensive production, tooling, molding, paint and assembly services; we have seamless access to the complete vehicle development services offered by Roush's global team of design, styling, engineering and testing specialists.

