

*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.*

*Roush... your silent partner in developing smoother, quieter products.*

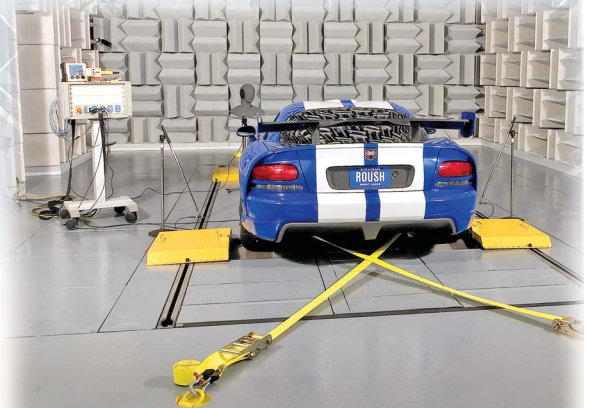
## NVH Chassis Rolls Dynamometer

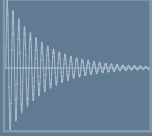
Roush is a leading supplier of noise and vibration control engineering and consulting services, offering field and laboratory testing as well as acoustic dynamometer testing of vehicles, engines, transmissions, brakes and components. Through our combination of NVH experts, equipment and facilities, Roush is uniquely qualified to provide the highly specialized design, analysis, testing, and engineering services necessary to solve complex noise and vibration issues.

The Roush NVH Chassis Roll Dynamometer is the centerpiece of our vehicle NVH development services. It is available as a stand alone tool, or in conjunction with measurement equipment, mechanical and engineering support. It provides our OEM and Tier customers an independent facility, allowing them to use their own staff and equipment to perform tests, or to direct a Roush team in the development of their vehicle systems. Additionally, our customers can expect accurate, unbiased results with the security of knowing Roush will protect customer privacy and confidentiality.

### Available Options:

- NVH dynamometer with operator
- Data acquisition equipment
- Data analysis systems
- On-site technical/mechanical support
- On-site engineering support
- Complete program management





## NOISE AND VIBRATION ENGINEERING

### Dynamometer Features:

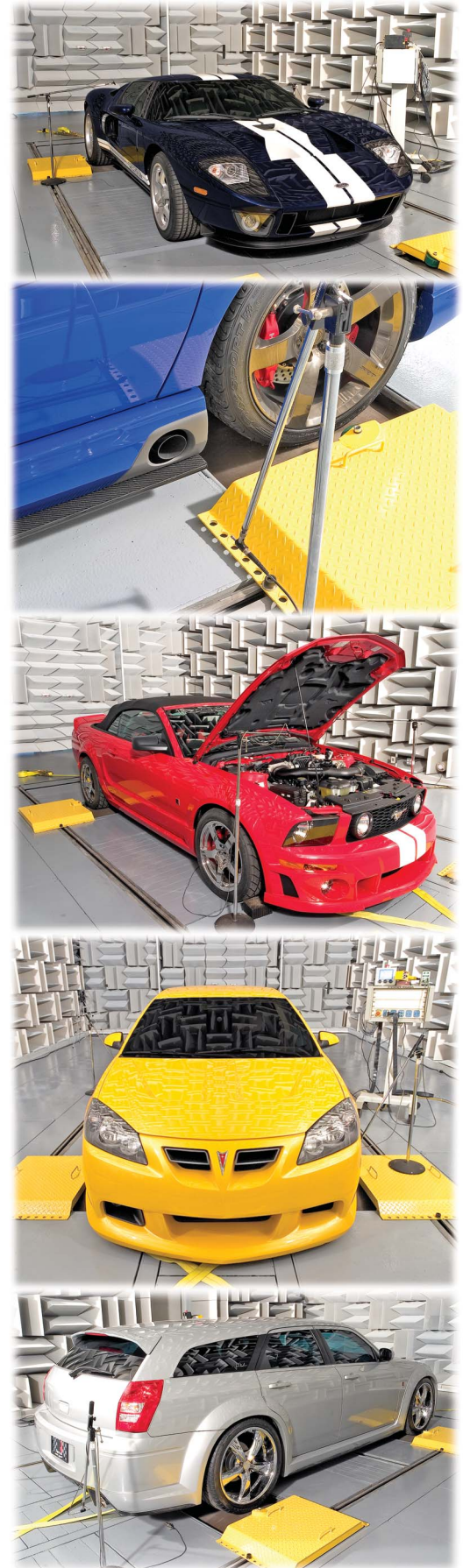
- 4WD NVH chassis rolls with Schenck Pegasus dynamometers and controls
- Independent dynamometers for front and rear axles allow 2WD & 4WD operation
- 72" diameter rolls with smooth, square edge impact strip, or periodic inputs
- Wide rolls to accommodate dual wheels
- 300 HP absorbing and motoring capability per axle
- Adjustable wheelbase of 95" to 175"
- 12,000 lb total GVW – 6,000 lb per axle
- 120 MPH maximum vehicle speed
- Roll surface treated to minimize tire noise
- Isolated seismic mass mountings reduce the sensitivity of the facility to outside sources of vibration

### Test Chamber Features:

- Interior dimensions: 40' long x 23' wide x 14' high
- Eckles Noise Control Technologies acoustic wedge system and doors
- 100 Hz acoustic cut-off frequency
- Concrete block outer room for excellent TL/ isolation from outside noise
- Background Noise level less than 35 dB(A)
- Operating Background Noise level less than 45 dB(A)
- Variable Speed Blowers for Vehicle Cooling and Vehicle Exhaust Ventilation
- Excellent thermal management system
- Modern personal and vehicle safety systems

The Roush advantage: we get the job done, and we provide turnkey support. We specialize in supporting urgent development requirements with extensive resources and round-the-clock support. Roush simplifies the process by providing manpower, tools, equipment, fabrication, shop capability, and engineering support.

***Roush. Your silent partner.***



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