



VEHICLE DYNAMICS TESTING SERVICES

Roush Industries' Test and Measurement products provide PC-centered solutions and tools related to test, measurement and control. Through the use of software and modular electronic hardware components, we are able to provide fully functioning tools that have been customized for a specific engineering task.

Roush provides many standard commercial software and hardware systems for noise and vibration applications such as brake NVH testing, vehicle dynamics data acquisition, vehicle dynamics data analysis, and sound intensity data acquisition and analysis.

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](#).



VEHICLE DYNAMICS SERVICES

Roush engineering can provide a full range of vehicle dynamics services including:

- Simulation of components
- Performance vehicle handling
- Vehicle test tools
- Vehicle dynamics testing
- Training in vehicle dynamic test.

Roush is experienced in providing testing services for vehicles ranging from performance to utility vehicles and motorcycles to semis.

Roush vehicle dynamics testing services are typically accomplished with the Roush DRIVE™ data acquisition system and sensors to measure the following:

- Advanced non-contact speed and slip measurement
- Body roll non-contact and axle referenced measurement
- Steering wheel position and force measurement
- Strain gauge for chassis and suspension components
- Steering and brake system flow and pressure measurement
- Up to six degrees of freedom motion measurement
- Force measurement
- Temperature measurement
- Track position
- Other component specific instrumentation

Roush vehicle dynamics testing services range from to full vehicle blue printing and benchmarking to test sequences including the following:

- On-Center Steering Test
- Frequency Response Test
- Lane Change Test
- Parking Effort Test
- Power Steering Efficiency
- Constant Radius Test
- Straight-line Acceleration
- Straight-line Deceleration
- Swept Steer
- Step Steer
- Tire performance
- Brake pedal feel
- Four-wheel drive specific maneuvers
- Snow/ice maneuvers
- Component specific tests
- Custom procedures

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VEHICLE DYNAMICS SERVICES

In conjunction with our CAE, Adams modeling and prototype services, Roush's vehicle dynamics teams can provide:

- Chassis system engineering verification through objective measures
- Full chassis system engineering
- Component based chassis engineering
- Use data to build, create or verify ADAMS model
- Evaluations provided through subjective/objective measures by trained experts

Roush can aid in training in vehicle dynamics testing with such topics covered as:

- Specifying and using of sensors for vehicle dynamics
- Theory that supports vehicle dynamics test procedures
- Test driving safety
- Driving techniques to ensure repeatability

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