

GS ENGINEERING OFFERS EXTENSIVE VEHICLE TESTING AND VALIDATION SERVICES.

We support development and performance testing of vehicles and vehicle sub-systems at our own purpose-developed facility, as well as on-site at government and private test facilities. Our test support can include turnkey tests from the initial planning stage, through logistical planning to full vehicle instrumentation, test execution and reporting.

VEHICLE TYPES TESTED

- Light , Medium, & Heavy Duty Trucks
- All-terrain Vehicles
- Trailers
- Multi-purpose Vehicles
- Military Wheeled Vehicles
- Military Tracked Vehicles
- Construction Equipment
- Specialty Vehicles



VEHICLE TEST CAPABILITIES



TEST TYPES OFFERED

- Development Testing
- Performance Testing
- Endurance/Durability Testing
- Suspension Testing & Tuning
- Noise, Vibration, & Ride Quality
- Vehicle Stability
- Tire & Runflat Evaluation
- Powertrain Development
- Brake System Testing
- Strain & Torque Measurement
- Thermal Signature & Imaging
- And Many Others . . .

TEST SERVICES

- Test Planning
- Test Execution per ISO, SAE, NATO or TOPs
- Real-time Data Acquisition & Analysis
- Test Correlation to FEA & Dynamic Simulation
- Mobile Test Trailer with Wireless Vehicle Connectivity
- Vehicle Ballasting & Weight Distribution
- Vehicle Maintenance & Repair
- Multiple Shift Operation with Experienced Drivers
- Full Test Reporting
- Test Incident Reports (TIRs)
- Test Facility Rental Options
- Course Terrain Profiling

DATA ACQUISITION & ANALYSIS SERVICES

DATA ACQUISITION SYSTEMS

8, 16, 32, 48 and 64 channel systems and ruggedized laptops configured for real-time wireless data acquisition and analysis are available.

AVAILABLE SENSORS

- Accelerometers
- Strain Gages
- Attitude Heading Reference System
- Speed & Distance
- Environmental
- Load Cells
- Lasers
- Displacement Sensors
- Pressure Transducers
- Voltage
- Thermocouples & RTDs
- Microphones
- Differential GPS
- CAN Bus

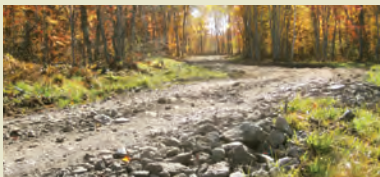


GS ENGINEERING TEST FACILITIES

OFF-ROAD COURSE & OBSTACLES

GS Engineering's off-road vehicle test course features a low visibility location, ideal for private vehicle development and performance testing.

- Paved 1" & 2" RMS Courses: 500' length
- Paved Half Rounds: 4", 6", 8", 10", & 12"
- Paved Side Slopes: 20%, 30%, & 40%
- Gravel & Paved Slopes: 15% - 40%, 60%
- Vertical Steps: 18", 24", & 36"
- Stability Tilt Table: 45,000 lbs & 50% slope
- Multiple Secondary Road Endurance Areas
- Multiple Off-Road Endurance Areas
- Gravel Frame Twist & Urban Rubble Course
- Many Other Customizable Terrain Options



PAVED VEHICLE DYNAMICS AREA

GS Engineering partners with Houghton County Memorial Airport for paved vehicle dynamics testing. We have expertise with the following vehicle dynamics tests:

- NATO Lane Change
- Sinusoidal Steer
- Constant Radius Circular Steer
- Ramp Steer & J-Turn
- Braking
- Maximum Speed
- Acceleration & Dash Speed
- Vibration Testing
- Fuel Economy
- Turning Diameter
- Suspension Tuning
- Correlation to Dynamic Simulation

CONTACT US



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