

SGS VEHICLE & ENGINE TESTING

RESEARCH, DEVELOPMENT AND CERTIFICATION TESTING WITH ENVIRONMENTAL CONDITIONS

SGS is equipped with a comprehensive array of laboratories capable of testing under extreme environmental conditions, at sea level, at altitude and even at simulated altitudes through its patented technology. Our experts can help you with anything from your most basic testing needs for small engines all the way to custom designed complex tests for larger engines and vehicles. Let our independent lab complement your current testing program.



EXHAUST EMISSIONS CERTIFICATION

- Chassis dynamometer emissions laboratories compliant with EPA standards
- Federal and supplemental vehicle emissions certification testing
- EPA CAP2000 and In-Use Verification Program (IUVF)
- Motorcycle and ATV chassis dyno

VEHICLE DEVELOPMENT

- Emissions labs to meet customer needs, including environmental testing, catalyst efficiency determination, custom drive cycles and test procedures as well as exhaust specification
- Vehicle instrumentation, including exhaust sample ports, thermocouples, pressure transducers and data logging
- Large cold soak room for cold start and sub-zero evaluation of products to -22°F (-30°C)
- Certification and specialty fuels in bulk tanks and drums

EVAPORATIVE EMISSIONS

- Variable temperature SHEDs
- EPA and CARB procedures performed
- Point source running loss and fuel tank temp profile control
- On-board Refueling Vapor Recovery
- Canister loading and breakthrough

EXTREME TESTING LABS AT SEA LEVEL, ALTITUDE AND EVERYTHING IN BETWEEN

- Patented altitude simulation capable of testing 0 to more than 12000' (3660 m) above sea level for both steady state and transient engine operating conditions
- Combustion air temperatures may be set from 14° to 130°F (-10° to 54°C)
- Vehicle and engine testing labs available at both sea level and altitude

TYPICAL ENGINE TEST CELL USES

- Exhaust emissions certification tests, compliant with 40CFR Part 1065 and ISO8178 standards
- "Not-to-Exceed" performance and emissions testing at extreme environmental conditions
- Engine mapping and emission control system development
- Prototype engine development
- Electronic control system calibration
- Engine and aftertreatment component evaluations
- Verification of retrofit systems for state programs
- Fuel blends and additive studies
- Competitive benchmarking

CONTACT US

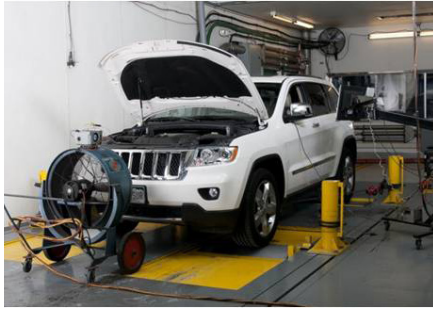
To request a quote or discuss your testing needs in detail, please call +01 844 730 4175 or email us.transportation@sgs.com.



SGS

SGS UNIQUE TESTING SOLUTIONS

When your testing is performed at an SGS laboratory, rest assured that the results will be of the highest quality in the industry. Our laboratories, located at sea level and at altitude, are used by automotive and engine manufacturers, suppliers, the petrol chemical industry, the research community and government agencies among others. We offer engine, vehicle and component testing, vehicle procurement, engineering services, design of experiments, control system calibration, data analysis and project management to meet specific customer needs.

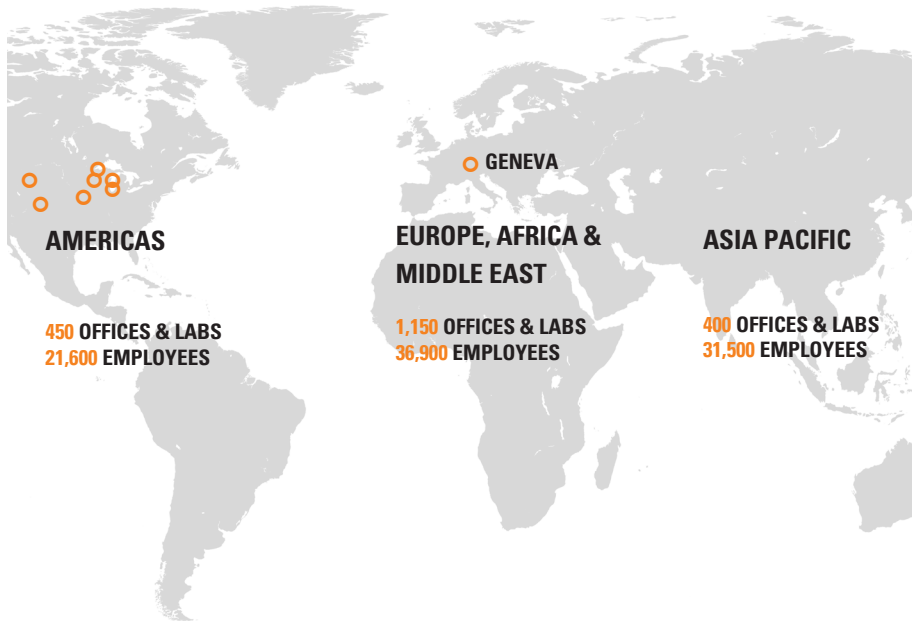


UNIQUE OFFERINGS

- Though we have labs at both altitude and sea level, our high-feature engine and vehicle test cells are equipped with our patented altitude simulation system (BASE™) and allow us to test powertrains from sea level and normal conditions to extreme altitude and variable temperature conditions.
- Our labs are equipped with comprehensive security and video surveillance systems to ensure customer confidentiality.
- Our highly skilled and experienced staff tests new products, performs research and development and ensures compliance with federal and state emissions regulations.
- Our core business is the advancement of test technology and methods to enable the development of next-generation powertrains.

SGS GLOBAL & LOCAL

90,000 EMPLOYEES | 2,000 OFFICES & LABS AROUND THE WORLD



VARIABLE ALTITUDE ENGINE & VEHICLE TESTING AT ALTITUDE
Aurora, CO

TEST CELL SOLUTIONS, SOFTWARE AND VARIABLE HORSEPOWER ENGINE AND VEHICLE TESTING AT SEA LEVEL
Columbus, IN

FUEL & COMPONENT SYSTEMS TESTING
Lapeer, MI

MILEAGE ACCUMULATION CENTER AT SEA LEVEL
Jackson, MI

ROCKY MOUNTAIN HIGH ALTITUDE TEST CENTER
Empire, CO

CATALYST AGING & COMPONENT TESTING SERVICES
Taylor, MI

COMPONENT TESTING & ENGINEERING SERVICES
Troy, MI