

# SGS VEHICLE & ENGINE TESTING

## SPECIFICATIONS FOR VEHICLE AND ENGINE TESTING WITH ENVIRONMENTAL CONDITIONS

SGS's network of transportation industry testing facilities are equipped with an array of test cells that allow our experts to test under extreme environmental conditions. With test cells at sea level, at altitude and even at simulated altitudes through its patented technology, we can test anything from small engines all the way to larger engines and vehicles. Let our independent lab complement your current testing program.

### ENGINE TEST CELL SPECIFICATIONS

DYNAMOMETER TYPE	MAX SPEED (RPM)	PEAK ABSORBING TORQUE (CONTINUOUS)	RATED ABSORBING POWER (CONTINUOUS)	SEA LEVEL OR ALTITUDE
AC Electric Motoring/Absorbing	4500	2668 lb-ft / 3617 Nm @ 0-1450 rpm	736 hp / 549 kW @ 1450-4500 rpm	Variable Altitude*
AC Electric Motoring/Absorbing High Speed Low Inertia	9000	570 lb-ft / 772 Nm @ 0-4000 rpm	430 hp / 320 kW @ 4000-7000 rpm	Variable Altitude*
AC Electric Motoring/Absorbing High Speed Low Inertia	6700	412 lb-ft / 560 Nm @ 0-2000 rpm	156 hp / 117 kW @ 2000-4400 rpm	Variable Altitude*
AC Electric Motoring/Absorbing	3600	2000 lb-ft / 2711 Nm @ 0-1500 rpm	600 hp / 447 kW @ 1500-3600 rpm	Sea Level
Eddy Current Absorbing Only	6000	805 lb-ft / 1092 Nm @ 1000-1500 rpm	230 hp / 172 kW @ 1500-5000 rpm	Variable Altitude*
Eddy Current Absorbing Only	4000	> 3000 lb-ft / 4067 Nm @ 500-1600 rpm	1200 hp / 895 kW @ 1600-4000 rpm	Sea Level

### VEHICLE TEST SITE SPECIFICATIONS

DYNAMOMETER	ABSORBING POWER (HP/KW)	AIR TEMPERATURE RANGE (°F / °C)	EMISSION SAMPLING	SEA LEVEL OR ALTITUDE
AC Electric Single 48" Roll	200 / 149	-20 to 110° F -29 to 43° C	5 Streams + Bag Gas & Diesel CVS	Variable Altitude*
AC Electric All-Wheel Drive Two Independent 48" Rolls	350 / 261 Front 450 / 336 Rear	0 to 110° F -18 to 43° C	5 Streams + Bag Gas & Diesel CVS	Variable Altitude*
AC Electric Single 48" Roll	200 / 149	50 to 110° F 10 to 43° C	4 Streams + Bag Gas CVS	Variable Altitude*
AC Electric Single 48" Roll	200 / 149	0 to 110° F -18 to 43° C	3 Streams + Bag Gas CVS Running Loss	Variable Altitude*
AC Electric Single 48" Roll	200 / 149	-10 to 110° F -23 to 43° C	3 Streams + Bag Gas CVS	Sea Level

\* SGS's patented Balancing Altitude Simulation Equipment (BASE) offers static and dynamic simulation of altitudes from sea level to 14,000 ft or 4,270 M

#### 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](mailto:us.transportation@sgs.com).

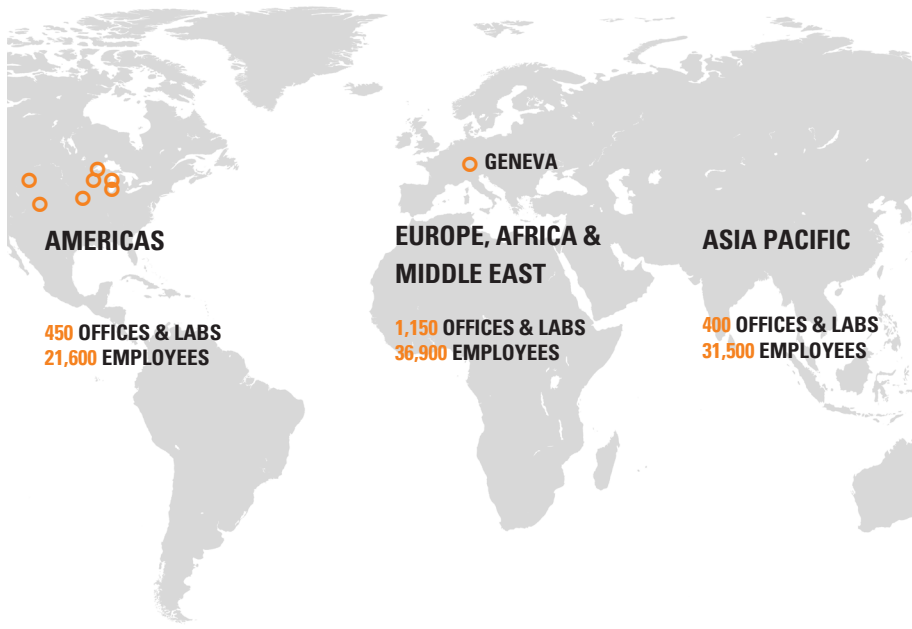


## SEA LEVEL VEHICLE MILEAGE ACCUMULATION DYNAMOMETER SPECIFICATIONS

FEATURES	TYPICAL USES
• Eddy current absorbing, single 40" roll	• Rapid non-road mileage accumulation
• Driverless, automated throttle and braking	• Catalyst, transmission and driveline aging
• Road load model, programmable drive cycles and OBD interface	• Exhaust emissions deterioration
• Road speed modulated frontal cooling fans	• Fuel effects and lube evaluations
• Data acquisition, comprehensive alarms and safeties	• Diesel particulate filter regeneration studies
• OBD Individual video recording of vehicles interface	• Front wheel drive and rear wheel drive
• Secured facility	• Cost effective, low risk alternative to drivers

# 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