

# MILEAGE ACCUMULATION DYNAMOMETERS



## **Mileage Accumulation**

### **Driverless Aging on Eddy Current Dynos**

**Engine & Catalyst  
Deterioration  
Component Durability  
Fuel and Oil Effects**

**Located in  
Jackson, Michigan**

SGS Environmental Testing Corporation offers a mileage accumulation dynamometer (MAD) facility in Jackson, Michigan for aging passenger cars, trucks and light duty commercial vehicles.

The facility features seven eddy-current dynamometers and a flexible automation system for data acquisition, customized drive cycles and alarming.

The MADs are most commonly used for aging vehicles to determine the engine and catalyst emissions deterioration performance at full useful life.

Using the EPA's Standard Road Cycle, vehicles can be aged to 120,000 miles in four months.

The test vehicle is fitted with a throttle pedal actuator and the eddy current dynamometer provides vehicle braking. Closed loop control systems ensure accurate and repeatable drives on the dynamometer. Sensors and customized alarms may be added for vehicle protection, including monitors for oil, coolant outlet, transmission, and exhaust temperatures, oil pressure and vehicle over-speed.

MAD testing offers distinct advantages over on-road vehicle aging:

- Eliminates risk to the on-road driver
- Eliminates potential on-road vehicle accidents
- Vehicle is aged in a controllable and repeatable manner
- Vehicle is aged more rapidly, at a rate of 1000 miles/day per vehicle using the Standard Road Cycle
- Uninterrupted testing in inclement weather
- More cost effective



Mileage Accumulation Dynamometer Facility, Jackson, Michigan

### Typical Laboratory Uses:

- Rapid non-road mileage accumulation
- Engine and catalyst control system aging
- Exhaust emissions deterioration
- Vehicle load acceptance
- Vehicle calibration development
- Fuels and fuel poisoning effects
- Lube evaluations
- Diesel particulate filter regeneration studies
- Transmission and driveline aging

### Laboratory Features:

- 7 Mileage Accumulation Dynamometers
- Eddy current absorbing, single 40" roll
- Driverless, automated throttle and braking
- Road load model
- Programmable drive cycles
- Road speed modulated frontal cooling fans
- Data acquisition, comprehensive alarms and safeties
- OBD interface
- Video surveillance and recording for each vehicle
- 24 hour / 7 day operation



For more information, please contact:

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WHEN YOU NEED TO BE SURE

