# ENGINEERING

## **POWERTRAIN TESTING**



#### FOCUSED ON TESTING EXCELLENCE

Lotus Engineering is at the forefront of efficient performance and clean fuel technologies, and leading the way in hybrid and electric vehicles.

Our multi-skilled technicians and engineers have extensive experience in developing and testing a wide range of powertrains including gasoline, diesel or alternative fuels as well as hybrid and electric systems. Over forty global test cells and emissions laboratories provide clients with comprehensive development and testing capability, from discrete tests to full development and validation on small or large powertrain programs, all to the latest worldwide legislation, emissions and conformity of production (CoP) requirements.

As an engineering consultancy and manufacturer of premium cars designed to excite and perform, our breadth of technical knowledge and understanding is unrivalled. Lotus Engineering's unique heritage as an OEM distinctively positions us in the market as an industry leading engineering consultancy. Our depth of knowledge, specialized skill sets, and test facility capabilities lend to that advancement.

Lotus Engineering is dedicated to meeting our clients' objectives and program deliverables on time, every time.

#### CORE SERVICES AND CAPABILITIES

- Engine durability and validation
- Transient diesel emissions development
- Powertrain development, article inspection and teardown
- Hybrid and electric powertrains
- Electric or internal combustion engine driven transmission testing
- Axle and driveline component testing
- Catalyst aging and component validation
- 24/7 operation of testing facilities

#### CERTIFICATION

- EPA and CARB recognized for emissions certifications
- ITAR compliant (military)
- ISO 9001-2008 certified

## **POWERTRAIN LABORATORY**

- Seventeen validation test sites
- Six development sites with extended powertrain length configuration capability
- Large powertrain development test site (long bedplate: 35 ft by 11 ft, wide bedplate: 20 ft by 14 ft)
- Large inventory of over 85 dynamometers
- Broad power range covering engines and powertrains from 2 to over 2,500 HP

### **EMISSIONS LABORATORY**

- Two mileage accumulation chassis dynamometers for motorcycles and ATVs
- 48" chassis roll dynamometer
- Motorcycle dynamometer
- Evaporative shed
- Vehicle-soak room

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