

Engine

TECHNOLOGY CENTRE

DEVELOPMENT • DURABILITY • EMISSIONS • ECONOMY

- Modern, reliable, accurate engine test cells
- Complex vehicle preparation & results analysis
- Complete emissions capability
- Track & laboratory-based fuel economy
- Hybrid test, calibration & integration

Offering a breadth of expertise seldom available commercially, Millbrook can help solve the powertrain challenges now facing vehicle developers and their specialist suppliers.

With more than 150 man-years of engine dynamometer experience, Millbrook's Engine Technology Centre, with 12 test cells with transient and eddy current dynamometers to 440kW, and one test cell with high-dynamic transient dynamometer for state of the art engine development, is well placed to meet your powertrain test and development needs.

Technical SPECIFICATIONS

Engine Technology Centre

- For test programmes from simple durability through to sophisticated research and development
- One test cell with 330 kW high-dynamic transient dynamometer for state of the art engine development
- Two test cells with 250kW AC regenerative vector drives for fully-transient drive-cycle and research applications
- Nine test cells with up to 400kW eddy current dynamometers
- Full vehicle exhaust systems
- Temperature-controlled combustion air intakes
- Feeds for a variety of gasoline, diesel and alternative fuel blends
- Thermal shock capability
- Constant volume sampler on transient engine test cells for gasoline and diesel emissions testing
- Emissions measurement – raw, tailpipe, bag and PM
- Combustion Analysis

Technical SPECIFICATIONS

Drive-Cycle Simulation

- High-Dynamic and AC dynamometer cells perform full drive cycle simulations, including road load, gradients, driveline dynamics, vehicle inertia, gear shift and gearbox/final drive ratios.
- Drive cycles for all major world markets and usage patterns can be quickly developed by instrumenting vehicles on Millbrook's proving grounds or by collecting data from vehicles in service

Millbrook OVERVIEW

Millbrook is one of Europe's leading locations for the development and demonstration of every type of land vehicle, from motorcycles and passenger cars to heavy commercial, military and off-road vehicles. Located at the geographical centre of the UK automotive and fuels industry and situated centrally in the strategic Oxford to Cambridge Arc just 65 kilometres to the north of London, our custom-built facility provides virtually every test, validation and homologation service necessary for today's demanding programmes, complemented by a worldwide reputation for confidentiality, service and competitiveness.

Although significant work has been done commercially on behalf of many research organisations, Millbrook has always focused on real world applications and understand the constraints, limitations and budgetary controls that affect our customers. Our staff have experience and expertise from backgrounds in test work within vehicle manufacturers' engineering departments, so they know what their customers expect from a test. Putting working relationships first, and seeing things from the customer's point of view, means Millbrook's support will survive the test of time.