

Crash

DUMMY FLEET

STRUCTURAL • OCCUPANT • PEDESTRIAN • SYSTEMS

- Crash, HyGe & Safety Systems
- Test to Global & Corporate standards
- Legislative, development, model correlation
- Facilities used for official EuroNCAP tests
- Equipped to support high complexity tests

Millbrook's Crash Laboratory has held an outstanding track record in the field of crash testing for over 35 years. Our tried and tested facility design ensures excellent speed and alignment accuracy, carrying out the full range of frontal, side, rear and rollover impact scenarios to global or corporate standards, including FMVSS, ECE and EEC equivalents, TRIAS, ADR and insurance tests to Thatcham, Danner and AZT. We also have extensive experience of testing to Euro & USNCAP Protocols, including vehicle assessments by a former EuroNCAP Project Manager.

Millbrook's HyGe Laboratory has been providing test services to the rail, marine and aerospace industries for over 35 years, testing to Global and Corporate standards.

The Safety Systems Laboratory offers a range of flexible facilities for component and system testing for legislative approvals, development and model correlation. All tests benefit from rapid and customised data delivery so results can be evaluated quickly and decisions made.

Combining the original TRL-developed Pedestrian Impact test system with Millbrook's facilities and expertise provides a well equipped, flexible and knowledgeable resource for both development and homologation. Millbrook has established a strong reputation for achieving programme objectives quickly and cost-effectively, using its many years of commercial experience to deliver precisely what is needed. Now, with the definitive test system, the facility can deliver a wide range of tests at every stage of a pedestrian protection programme.

Equipped to support high complexity tests, we also offer the ultra-compact TDAS G5 Data Acquisition System, just one-thirtieth the size and a fraction of the weight of a typical DAS unit, and digital cameras using a recording module that can be mounted anywhere in the vehicle with separate camera heads, some just two centimetres in diameter, providing flexibility to mount them wherever images are required.

Technical SPECIFICATIONS

Crash Dummy Fleet

- Hybrid II 50th %ile Available with lumbar spine load cells for JAR 25.562 & SAE AS 8049 aircraft seat testing
- Hybrid III 5th %ile
- Hybrid III 50th %ile
- Hybrid III 95th %ile
- EuroSID
- EuroSID 2
- EuroSID 2 RE
- US SID
- Hybrid III 3 year old
- Hybrid III 6 year old
- TNO 'P' series 9 month old
- TNO 'P' series 18 month old
- TNO 'P' series 3 year old

Special Instrumentation:

- Instrumented Lower Legs, and 45° feet for Hybrid III 5th %ile.
- Instrumented Lower Legs, Knee Sliders and 45° feet for Hybrid III 50th %ile.
- Six-axis Upper Neck Load Cells for Hybrid III 5th, 50th & 95th%ile and BioSID.
- Six Axis Lower Neck Load Cells for Hybrid III 50th & 95th%ile and BioSID.
- TRID Neck for Hybrid III.
- Submarining Indicating Pelvis for Hybrid III 5th.
- Instrumented Feet and knees for Hybrid III.
- Angle Rate Sensors for Hybrid III
- Back Plate Load Cell for EuroSID (flat & curved).
- Shoulder Load Cell for EuroSID.
- Hybrid III Neck & Head fitted to US SID.

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.