



STRUCTURAL TEST LABORATORY

Description

CSA Group Leyland operates one of the most sizable and well equipped structural test laboratories in Europe. The area, totalling 800m², is supported with two electro-hydraulic rig mains, a reinforced concrete strong floor grid and a dynamic modular beam system. The laboratories can accommodate test samples from component level right up to full HGV vehicle bodies and bigger.

Typical Applications

- 4 or 6 point beam axle testing
- Air suspension axle testing
- Multi-axis suspension testing
- MAST: 5 axis shake table
- 5 axis commercial vehicle exhaust testing
- 7 axis testing for chassis mounted components (including exhaust system testing)
- Hub fatigue testing
- Steering system testing
- Static strength, torsion, bending, fatigue, durability and ultimate strength testing
- One-off custom rig tests, rapid turnaround

Specification

Overall dimensions:	Hall 1: 30m x 11m x 8m - 280bar Hall 2: 25m x 18m x 8m - 210bar
Actuators:	60 actuators ranging in size from 5kN through to 500kN with valving to suit the application
Multi-axis rig capability:	Up to 16 channels (block programme) Up to 8 channels (load simulation) Up to 16 channels MTS RPC
Pump capacity:	1980 l/min
Floor:	Reinforced concrete strong floor with hard points on a 1m grid
Services:	High pressure air supply for vehicle air suspensions Forced air cooling Diesel burners Climatic capabilities
Drive signal iteration:	MTS RPC 16 drive and 32 response channels LMS TWR system with 8 drive and 16 response channels
Data collection / analysis:	LMS Test.Lab National Instruments LabView nCode Glyphworks