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, reinforced concrete strong floor grid and 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 (Inc. exhaust system testing)
- Hub fatigue testing
- Steering system testing
- Static strength, torsion, bending, fatigue, durability and ultimate strength testing

### 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:**
- LMS TWR system with 8 drive and 16 response channels & MTS RPC

**Data collection / analysis:**
- LMS Test.Lab
- National Instruments LabView
- nCode Glyphworks

CSA Group testing UK LTD, Aston Way, Leyland, Preston PR26 7TZ, United Kingdom
Tel.: +44 (0) 1772 422 911 / E-Mail: ukinfo@csagroup.org / Web: www.csagroup.org www.csagroupuk-transportation.org