



VEHICLE TEST WORKSHOP

Description

The vehicle test area at CSA Group Leyland has been designed to support a number of whole vehicle testing applications, from the use of our vehicle weighbridge and roller brake to a functional vehicle workshop, including a 15m long pit and four 7.5 tonne electronic lifters. These facilities can support various vehicle test activities from small passenger cars to heavy goods / commercial vehicles, and can be complemented by our chassis dynamometer and VSAC (vehicle semi anechoic chamber).

Our vehicle weighbridge allows the simultaneous measurement of individual axle loads and total vehicle weight for up to 3 axle vehicles. Test weights are available to load a vehicle to its required test weight whilst resting on the weighbridge, allowing accurate and efficient vehicle loading. Loading frames can be constructed to support high centre of gravity (CoG) loading. The weighbridge can measure vehicle weights up to 60 tonnes with an accuracy of +/- 10 kg. Use of the vehicle weighbridge and vehicle lifters enables vehicle centre of gravity measurements in accordance with ISO 10392.

The roller brake test facility features two pairs of electrically driven rollers which motor the wheels of an axle against applied brakes, enabling measurement of individual braking efforts. Hydraulically operated axle load simulation is built into the rig. Rollers can be operated in either rotational direction and can be combined with vehicle transducers to measure brake and control efforts.

Typical Applications

- Measurement of vehicle / axle loads
- Braking efforts
- Data acquisition packages
- General vehicle instrumentation
- Vehicle modifications
- Vehicle centre of gravity measurement

Specification

- Roller Brake:**
- Drive capacity per wheel 22 kW
 - Max torque per wheel 45,000 Nm
 - Test speed 2 km/h
 - Max axle load 13 tonnes
 - Vehicle track width 900 – 2600mm
 - Axle load simulation per wheel 6.1 tonnes
 - Built in datalogger or scaled BNC outputs