



Driver & Vehicle Standards Agency

Title	Addendum to Roller Brake Tester for HGV & PSV specification - Category N2, N3, M2, M3, O2, O3, O4. Roller brake testing incorporating load simulation.
Equipment purpose	HGV Lifting roller brake bed with chassis hold/pull down facility specification
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1. Introduction

This addendum specification details the technical and constructional requirements for Roller Brake Testers (RBTs) using a lifting roller bed(s) and chassis hold/pull-down to simulate a load for the statutory brake performance testing of Heavy Goods Vehicles (HGV – motor vehicles and trailers). DVSA do not use load simulation for Passenger Service Vehicles (PSV).

A lifting roller bed is defined as hydraulically lifting roller bed(s) that when operated, lifts a vehicle axle from ground level. The lifting bed(s) must be combined with a vehicle chassis holding and/or a pull-down facility. This holding/pull-down facility will enable the axle, when raised, to be pushed towards the vehicle chassis simulating a load applied to the vehicle. This will activate any vehicle load sensing devices increasing the braking effort due to the load applied.

The hold down facility can be static or sliding, the sliding facility can be at ground level, in the pit or a combination of the two.

Roller brake testers with lifting roller bed functionality will be required to meet all technical requirements of the Roller Brake Tester for HGV & PSV specification, with the addition of.

2. Technical Requirements – supporting evidence supplied by the manufacturer.

- The lifting bed(s) will raise and lower hydraulically, level and simultaneously with each other.
- The roller bed(s) will raise no more than 300mm and have an automatic stop when the lift limit is reached.
- The lifting roller bed(s) must be capable of lifting a minimum of 10000Kg.
- There must be a hydraulic over pressure cut-off to prevent damage to the roller bed, hydraulic pull-down, vehicle or testing facility.

- The roller bed(s) must have a failsafe in the event of hydraulic failure to prevent any uncontrolled dropping of the bed(s).
 - The lifting/lowering and pull-down can be operated via separate console or incorporated into the roller brake tester. Additionally, it can also be operated via a hand control or tablet. The hand control or tablet must be sufficiently robust to be used in a workshop environment.
 - The lifting and lowering of the roller bed(s) may be operated manually or automatically. When lifting automatically, the computer will monitor the weight imposed on the axle and not allow it to become overloaded. The computer must compensate for any suspension changes during the imposition of the load.
 - If the roller bed(s) operate automatically or semi automatically, there must be an emergency stop control on the console in case of emergency.
 - The operation of the lifting/lowering of the roller bed(s) or the pull-down facility must cease if communication from the control is lost.
 - A manual facility for lowering the roller bed(s) is required in the event of power loss.
 - The chassis hold chains/straps must have a minimum breaking load of 5000kg each.
 - Any chassis clamps must be designed so that the load is spread sufficiently to not bend or damage the vehicle chassis.
 - If a floor sliding chassis hold facility is used, the track must be embedded into the floor and sufficiently hold the load of a minimum of 10000kg at any point along its length.
 - Pit anchoring for chassis hold/pull-down will be required to hold a load of 10000kg across the pit. This also applies to any sliding anchor(s) within the pit.
 - The operation of the lifting roller bed(s) will be inspected during the roller brake tester calibration as described in the Roller Brake Tester for HGV & PSV specification. This will include hydraulic pipes, fittings and holding facilities as well as a full function test.
 - The lifting bed(s) will be subject to LOLER* checks.
 - An instruction manual will be supplied in English which must include safe working practices, checks and risk assessments required for the testing facility.
 - If the roller bed(s) are installed over a pit, there must be an automatic stop function which shall stop lifting /lowering action whenever a person enters the dangerous area of the pit (the whole pit length or at least 2.5m from the rollers in any direction). This will also apply to the pull-down facility.
 - The lifting roller bed(s) combined with a roller brake tester will be approved with a unique EIN** which is different than that of the standard roller brake tester.
 - During the lifting of the roller bed(s) and/or the use of the pull-down facility, the RBT will show the axle weight increase in real time so that the operator will know when to stop the operation.
- Note:** DVSA requires that at least 65% of the design axle weight be applied to all non-steered rear axles.
- The RBT will allow the brake test to continue if 65% of the design axle weight is not achieved – this will allow for air suspension weight transfer when testing the vehicle's lift axles.

*LOLER = Lifting Operations and Lifting Equipment Regulations

**EIN = Equipment Identification Number (supplied by the Garage Equipment Association)

3. Change table

Amendment	Version	Date
Amended chassis hold and pit anchorage to 10000kg from 20000kg on advice from industry	2.0	15/10/2025
Remove the 6 months requirement for LOLER checks as this was incorrect.	2.0	15/10/2025