

DLG TestService

Global standard for safety

MORE INFO



Cab tests in accordance with
international standards

- Testing:
ROPS, FOPS, TOPS, OPS/OPG
- Seat belt anchorages
- Truck cabs

Cab and driver safety checks for tractors, mobile working machines and trucks

DLG TestService offers comprehensive, internationally recognised driver safety tests at its Test Center in Groß-Umstadt, Germany. The focus is on cabs and driver's cabs, which are tested for their stability and protective effect under realistic conditions.

With its international experience and strong network, DLG is a reliable partner for all testing requirements in the field of cab and driver safety that goes far beyond agricultural machinery. The testing laboratory is accredited according to ISO 17025 and designated as a technical service in all relevant testing areas.

The testing is based on national and international standards and norms. Each test comprises the execution, complete documentation with measured values and test photos, and the creation of a detailed test report. Upon request, DLG will also handle the entire approval process with the German Federal Motor Transport Authority (Kraftfahrt-Bundesamt) or the OECD Coordination Office.

National and international test standards

- EU regulations
- Machinery Directive 2006/42/EC
- OECD Standard Codes
- UNECE regulations
- ISO & EN standards for:
 - Road construction machinery
 - Earth-moving machinery
 - Hydraulic excavators
 - Forestry machinery
 - Industrial trucks
 - Special vehicles
- Other standards:
 - SAE
 - JIS
 - OSHA
 - CSA

Accreditation/designation

- DAkkS (German Accreditation Body)
- KBA (German Federal Motor Transport Authority)
- OECD

Test services



Seat belt anchorages

Seat belt anchorages are tested in accordance with different standards depending on the machine or vehicle.

- Regulation (EU) 1322/2014
- ISO 6683
- OECD Code 4, 6, 7, 8, 9
- UNECE-R 14



Truck cabs

Truck cabs are tested on a special test rig. These tests, which simulate a frontal impact or rolling over, are carried out dynamically using various pendulas, which are defined in the UNECE Regulation No. 29.03 test standard. From 30 January 2021 onwards, all trucks (vehicle categories N1, N2 and N3) must meet the requirements of UNECE Regulation No. 29.03 on being placed onto the market.



TOPS – Tip-Over Protective Structure

This excavator cab test simulates simple tipping over or falling over of the excavator.

- ISO 12117-1
- EN 474-5



OPS – Operator Protective Structure / OPG – Operative Protective Guard

The windows of forestry machinery or the protective guards of construction machines are loaded with the aid of a hydraulic cylinder for these tests.

- Regulation (EU) 1322/2014
- ISO 8084
- ISO 10262



ROPS – Roll-Over Protective Structure

Cab stability in the event of rolling over is tested. The roll-over protective structures must be designed such that a defined survival space is maintained in the event of rolling over once. This minimum survival space for the seated driver wearing a seatbelt is defined – depending on the vehicle type – via the respectively applicable standards:

- Regulation (EU) 1322/2014
- ISO 3471, ISO 8082, ISO 12117-2, ISO 21299
- OECD Code (3), 4, 6, 7, 8, 9



FOPS – Falling Object Protective Structure

The FOPS test is a dynamic test of the cab roof and the protective structure mounted above it against falling objects. Different standards are used as the basis depending on the type of vehicle and the required level of safety.

- ISO 3449, ISO 6055, ISO 8083, ISO 10262
- OECD Code 10

ROPS tests up to a gross weight of 100 tonnes: With its two ROPS benches, the DLG Test Center is also able to conduct cab tests for heavy machines up to a gross weight of approx. 100 tonnes. To accomplish this, test forces of approx. 1,500 kN can be applied horizontally and 2,000 kN vertically.

Testing of XXL cabs: Large cabs can also be tested at the DLG Test Center. The maximum dimensions of the unit under test, which is usually delivered on the vehicle or machine frame and fastened on the clamping plate of the test bench, are 5,000 mm x 5,000 mm x 3,700 mm (length x width x height).

Testing even at low temperatures: On request, all tests can also be carried out at -18°C.

You have the technology. We deliver the proof.

Information:



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Further DLG TestService testing and service offers:

- Testing services in accordance with OECD Tractor Codes
- PTO power, pulling power, lifting forces, hydraulic power
- Homologation/type-approvals (EU, UN ECE, StVZO)
- Tyre tests for tractors, trailers and implements
- Certification of lubricants, fuels and additives
- Vibration behaviour of seats for tractors and construction machinery
- Rear underrun protection devices of trucks and trailers
- Drive-by noise measurement, noise at the driver's ear
- Camera monitor systems
- Driver assistance systems
- Conformity assessments

DLG TestService GmbH is one of the leading international test and certification organisations for tractors, agricultural machinery and farm inputs. Our tests are based on the recognised DLG standards supplemented by comprehensive quality assurance in accordance with national and international standards. Our practical test methods are developed and continuously evolved by neutral expert committees. In addition to standardised test methods, we also offer bespoke tests for research and development as well as individual customer solutions. DLG TestService GmbH is an accredited and designated organisation that stands for independent quality in testing and certification services.

An overview of all accreditations and designations can be found at:



DLG TestService GmbH

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