
DLG Test Center
Technology and Farm Inputs

Testing forestry, municipal and garden equipment
Excellence in forestry, municipal and garden equipment testing

Testing machinery and equipment has been a core activity of DLG since the society was founded in 1885. The development and application of modern, scientific but also practical test methods is central to our mission. Unbiased and independent, DLG is the authoritative agency when it comes to assessing the utility value as well as the safety and reliability of forestry, municipal and garden equipment.

The tests are carried out at the DLG Test Center in Groß-Umstadt near Frankfurt and provide buyers with unbiased and reliable information on the products they are using. Equipment that has passed a DLG test has given evidence of its dependable performance on the test stand and in the lab. Performing more than 600 tests every year, the DLG engineers in the forestry, municipal and garden equipment segment offer manufacturers of small power equipment a comprehensive service which includes consultancy, safety tests to Machinery Directive, type approval tests, GS tests and further marking tests.

The DLG test engineers assess the practicality of small power equipment and award the DLG-APPROVED quality seal in collaboration with the German Center for Forest Work and Technology (KWF) which is also based in Groß-Umstadt and where the usability tests take place.

DLG Test Center Technology and Farm Inputs

DLG has been testing and awarding certifications to agricultural machinery and farm inputs for over 130 years. In fact, we are one of the leading agricultural institutes to test and certify tractors, machines and utility vehicles for field and on-farm use, including farm inputs as well as forestry, municipal and garden equipment.

As such, the Test Center at Groß-Umstadt generates valid information for machine users helping them to make knowledgeable purchase decisions and good use of the product. Up to now, this information has been made available to the public in more than 4,000 test reports that give farmers clear guidance on tractors and implements, livestock housing installations and udder hygiene products.

At the same time, DLG tests offer manufacturers the opportunity to view their products through the critical eye of their users: DLG tested products comply with stringent, up-to-date standards that meet user demands and take into account the manufacturers’ production standards. The test methods, test profiles and standards are developed by unbiased and independent test commissions and are based on the application of state-of-the-art test techniques and facilities.

Apart from applying DLG standards in its tests, the DLG Test Center also offers extensive testing services as a part of test approval seeking procedures in compliance with relevant standards and regulations, but also with individual quality assessment programmes and customer-specific R&D requirements.
Certifying agricultural and forestry equipment

The German Test and Certification Center for Agricultural and Forestry Machinery (DPLF) is a certifying institute that is jointly run by the German Center for Forest Work and Technology (KWF) and the DLG TestService GmbH. The institute’s long-standing experience in testing agricultural and forestry machinery allows it to offer manufacturers of municipal equipment a wide range of mandatory and optional product certifications for agricultural, forestry equipment and machines for park and highway maintenance.

The DPLF is accredited to ISO 17065 by the german accreditation body DAkkS and is a notified body at the European Commission notified by the German authority systems ZLS. Apart from that, it is an appointed test institute for GS marking. [www.dplf.de](http://www.dplf.de)

Valuable information for users and manufacturers

In times in which information is growing and updated at an ever faster pace in the field of forestry, municipal and garden equipment, high-quality test schemes that are developed and offered by an unbiased and independent organisation become eminently important. A key feature of such tests is their relevance to real-life business. Providing such unbiased and independent tests has always been a core aspect of DLG’s mission.

Users appreciate the results of the DLG tests and use them as a sound base for their decisions. These results are obtained by applying advanced methods that produce realistic and comparable data. The wide range of tests that are available from the DLG Test Center offer users unbiased and independent information for assessing a product – which is particularly important when making a purchase decision. Here, the DLG test reports and test results provide sound information to make a good investment. This calls for advanced test technology and practice-driven procedures.

Manufacturers of forestry, municipal and garden equipment can use DLG tests to provide evidence to customers that their products pass unbiased and independent tests. The DLG APPROVED quality seal is not only an indicator for dependable quality but also serves manufacturers with valuable product information derived from complex tests. The mandatory and optional tests provide manufacturers with sound and unbiased results that offer useful insights for their own R&D processes.

Accredited test institute

All tests are carried out by DLG TestService GmbH on behalf of DLG e.V. DLG TestService GmbH complies with the 17025 standards on test labs. The test lab is also recognised for testing products that are marketed in the North American market – for example, by the US Forest Service for testing spark arrestors and as an external test lab of the CSA Group.
What we test

We test for GS mark certification and type approval

- Chain saws and pole pruners (EC type-examination)
- Lawnmowers, scarifiers, hand-held motor mowers, power hoes
- Brush cutters, grass trimmers, lawn trimmers, lawn-edge trimmers
- Hedge trimmers
- Leaf blowers
- Earth augers
- Cut-off machines
- Flail mowers

Standard and regulation compliance tests

General forestry and garden equipment:
- Vibration measurements to Machine Directive 2006/42/EC

Brush cutters and grass trimmers to EN ISO 11806-1:
- Thrown-object test
- Brush cutter impact test incl. cord trimmer head overspeed testing
- Blade guard dimensions and strength
- Bend test of single-piece metal blades on brush cutters to ISO 7113

Lawn mowers to EN ISO 5395-1, EN ISO 5395-2, EN ISO 5395-3 and EN 60335-2-77:
- Blade stopping time tests
- Rotary mower blade impact tests
- Rotary mower housing strength tests
- Thrown-object tests on rotary mowers

Flail mowers:
- Thrown-object tests on flail mowers to EN 12733, EN 13524 and ISO 17101-2

Chain saws and cut-off machines:
- Chain saw kickback testing to ISO 9518 and ANSI/OPEI B175.1
- Chain saw performance tests to ISO 7293
- Chain brake performance to ISO 6535 (in collaboration with KWF)
- Non-manually actuated chain brake performance to ISO 13772 (in collaboration with KWF)
- Hand guard safety to ISO 6534 including ISO 6533 (front hand guard dimensions) (in collaboration with KWF)
- Chain catcher tests to ISO 10726 (in collaboration with KWF)
- Chainsaw handle tests to ISO 7915 and ISO 6533 (front hand-guard dimensions) and ISO 7914 (minimum handle clearance and size) (in collaboration with KWF)
- Balance tests to ISO 8334 (in collaboration with KWF)
- Drop tests ISO 11681-1 (in collaboration with KWF)
- Strength tests of cut-off machine wheel guards to EN ISO 19432
Testing of electric devices

- Engine test stand for heat-up measurements to EN 60335-1, EN 60745-1 and EN 62841-1
- Enclosure protection test (IP code) to EN 60529 (excluding IPX9)
- Glow-wire test to EN 60695-2-11
- Needle-flame test to EN 60695-11-5
- Ball-pressure test to EN 60695-10-2
- Comparative tracking indices (CTI) test to EN 60112
- High-voltage (electric strength) test to EN 60335-1, EN 60745-1 and EN 62841-1
- Leakage current test to EN 60335-1, EN 60745-1 and EN 62841-1
- Flexing test of cables and cord guards to EN 60335-1, EN 60745-1 and EN 62841-1
- Fully equipped electric lab for general tests and measurements

Material testing

- Temperature change and climate tests
- UV resistance tests
- Tensile strength tests
- Ammonium resistance tests
Awards and standard compliance testing

**DLG APPROVED FULL TEST**

The DLG APPROVED FULL TEST quality mark is awarded to agricultural equipment that has passed a DLG usability test on all aspects of the product. A DLG usability test is unbiased and assesses all major product features that are relevant for the day-to-day use of the product. The test conditions, procedures and evaluation parameters are defined by an independent test commission and described in a test framework. They are revised on an ongoing basis to reflect recognised state-of-the-art standards in technology, science and agriculture. The quality mark will retain its validity for five years from the date of award.

**DLG APPROVED for single, value-determining criteria**

The DLG APPROVED quality mark for single, value-determining criteria is awarded to technical products that have passed a less comprehensive DLG usability test. The purpose of the test is to highlight a product’s special innovative and key features. The test may include criteria that are laid down in the DLG test framework on Full Tests or may focus on further product features and properties that confer a specific value to the product. A DLG panel of experts defines the minimum standards to be applied to the product and describes the test conditions and procedures as well as the criteria by which the test results are to be evaluated. The quality mark retains its validity for five years from the date of award.

**Tested safety**

The German Test Center for Agricultural and Forestry Machinery (DPLF), a joint certification body that is operated by the DLG TestService GmbH and the Center for Forest Work and Technology (KWF) as equal partners, awards the GS mark for ‘approved safety’ at the DLG Test Center for Technology and Farm Inputs. The GS mark indicates that, if used as intended, the product presents no hazard to user safety and health. The GS mark is an optional seal. The manufacturer or its agent can decide to apply for GS testing.

**R&D tests**

DLG offers manufacturers confidential R&D testing of products under development as well as advice on their compliance with relevant regulations and safety standards. Also, we conduct these tests to manufacturers’ requirements and to specific remit. DLG ensures that its tests and results comply with all applicable standards and regulations and are treated confidentially and will not be published.
Innovative services

Our innovative marketing services offer customised communication packages in marketing approved products through direct, print or social media. Please do not hesitate to ask for a customised media package.

Contakt: Marketing@DLG.org

- **Direct**\(^\text{plus}\): Direct mailing services
  - Nationally and internationally
  - Approximately 600,000 direct addresses from agricultural and related target groups

- **Social Media**\(^\text{plus}\): Communication package for
  - Social networks
  - Interaction with agriculture related groups
  - Posts and tweets on Facebook and Twitter

- **Print**\(^\text{plus}\): High-quality print material
  - In several languages
  - Special prints of test reports and articles

- **Search**\(^\text{plus}\): Individual SEO/SEA campaign
  - Active advertising of specific product search terms
  - Optimised web presence and increased search engine hits

- **Video**\(^\text{plus}\): Have a video produced that highlights individual quality tests
  - Film documentation of the tests
  - Explanation of test methods and processes
  - Interviews with the DLG test engineers
  - Flexible content formats for YouTube channels
  - Film snippets on the DLG social media channels

- **Mafo**\(^\text{plus}\): Individual SEO/SEA campaign on products and concepts
  - Fully scalable sample
  - Agriculture/agribusiness
  - National and international campaigns
Leaders in the testing of agricultural equipment and input products

DLG has been testing agricultural machinery and farm inputs for over 130 years. The DLG Test Center Technology and Farm Inputs is one of the leading testing organisations for the international agricultural sector.

- **Vehicle technology**
  Tractors, components and accessories, electronics

- **Field operations**
  Arable and grassland equipment ranging from primary cultivation and drilling to fertiliser application and harvesting

- **Livestock farming and on-farm operations**
  Shed construction, livestock housing and equipment; renewable energies

- **Farm inputs**
  Feedstuffs, limes, hygiene products, clamp covers, etc.

- **Forestry, municipal and garden equipment**
  Power tools and mounted equipment

More information: www.DLG.org
Contact: Tech@DLG.org

DLG – the open network and professional voice

DLG aims to promote innovation in agriculture, agribusiness and the food sector around the world by the transfer of knowledge, quality and technology, and to make a sustained contribution to safeguarding global living standards.

Collaborating with experts around the world in an open international network, DLG develops future-proof solutions to meet the challenges faced by farming, agribusiness and the food sector. It organises internationally leading trade fairs and events in the specialist areas of crop production, animal husbandry, machinery and equipment for farming and forestry work, energy supply and food technology.

DLG’s quality tests for food, agricultural equipment and farm inputs are world leaders. Through its professional work and its network of experts, DLG repeatedly lends new impetus to the farming world.

www.DLG.org

DLG TestService GmbH
Location Groß-Umstadt
Max-Eyth-Weg 1 · 64823 Groß-Umstadt
Tel. +49 69 24788-600 · Fax +49 69 24788-690
Tech@DLG.org · www.DLG.org