# Putting animal welfare to the test

# Testing flooring systems and housing equipment

incl. DLG migration analysis of polycyclic aromatic hydrocarbons (PAHs)



www.dlg-testservice.com

# Testing flooring systems and housing equipment



With DLG-approved equipment, you get:

- meaningful expert appraisals
- an attention-grabbing tool for your marketing mix
- · clear and concise test reports individually prepared by our test engineers
- a reliable source of information for farmers making investment decisions

### Are you interested in our marketing services?

To make sure that your target groups also get to hear about your test results, we offer a range of bookable marketing services: e.g. videos, social media support, advertorials for newsletters and special editions of our test reports.

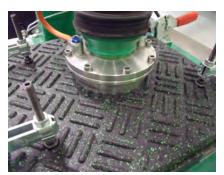
When it comes to evaluating the welfare-friendly nature of your livestock housing, you can rely on our experts. After all, they have been testing agricultural equipment and farm inputs for years. The product specifications, test methods and assessment standards developed in conjunction with our test commissions take account of the latest scientific insights as well as specific practical requirements.



# Flexible housing flooring – our service

- Testing to DIN 3763 and DIN 3762
- DLG test results to certify compliance with requirements of farm investment funding schemes
   or animal husbandry ordinances
- DLG test results to certify compliance with the ISO 22941 standard







# DLG tests for flooring systems

Flooring and floor coverings are central in observing animal welfare standards in livestock buildings. The flooring is the only piece of equipment that is used by the animals 24 hours a day, 7 days a week. High-quality flexible floor coverings have

been found to improve animal comfort and welfare. To determine the welfare-friendliness of livestock flooring, we test whether use of the flooring system allows the animals to behave in a species-appropriate manner without causing them any harm.

We also focus on standard durability criteria and assess its performance in real-life conditions. Flooring systems that pass the DLG tests are awarded the "DLG APPROVED" quality seal. We test to DIN 3763 and to certify compliance with farming investment funding schemes or animal husbandry ordinances. We can also certify compliance with the international standard ISO 22941.

| Product-related test criteria                    | Animal-related test criteria         |
|--|--------------------------------------|
| Durability and comfort characteristics           | Slip resistant                       |
| Resistance of comfort characteristics/simulation | Elastic deformability                |
| of long-term loading                             | Safe to walk on                      |
| Resistance to acids/chemicals                    | Video observation/direct observation |
| Resistance to pressure washing                   | Assessment of skin                   |
| Behaviour under climatic stress                  | Field tests                          |
| PAH-harmless                                     |                                      |
|  |                                      |

Detailed information about DLG tests and test criteria:



DLG migration analysis of polycyclic aromatic hydrocarbons (PAHs)

Polycyclic aromatic hydrocarbons (PAHs) are ubiquitous in our environment, e.g. in housing flooring, rubber teat cup liners and feed equipment. Some variants are considered to be carcinogenic. Based on the stringent requirements of DIN 3763, our experts test to DIN 3762 to determine whether PAHs from housing installations and accessories for cattle, dairy cows and horses can enter the environment.

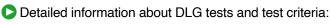


Products that comply with the guidance values are awarded the DLG Quality Seal "PAH-harmless".

The main purpose of this test is to protect animals and consumers from harmful chemicals. The standard risk assessment required under food legislation is used for potential substance migration.

| Product-related test criteria  | Test criteria  |
|--|--|
| <ul> <li>Housing floor coverings</li> <li>Housing construction (doors, gates, windbreak netting)</li> <li>Housing and grazing accessories</li> <li>Trough and drinking systems</li> <li>Animal care equipment (cow brushes)</li> <li>Bedding</li> <li>Enclosures</li> <li>Milking equipment</li> <li>Housing equipment (feed fences, cubicle dividers)</li> <li>Calf pens</li> </ul> | <ul> <li>Annual quality control</li> <li>Laboratory analyses: Checking the total PAH content and the migration of PAHs (polycyclic aromatic hydrocarbons)</li> <li>Verifying compliance with the guideline values: migration guideline value of 5 µg/dm² for the sum of the 8 EU REACH PAHs and 10 µg/dm² for the sum of the 15 + 1 EU SCF PAHs</li> </ul> |







**DLG TestService GmbH** is one of the leading international testing and certification organisations in the field of tractors, agricultural machinery and farm inputs. DLG test methods are developed by impartial commissions and based on practical experience.

In addition to testing to DLG standards, our range of services includes extensive quality assurance testing and certification to national and international standards and regulations, as well as customised tests for research and development purposes. DLG TestService GmbH is accredited and appointed for comprehensive testing and certification services.

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# DLG quality seals explained

# **DLG APPROVED Full Test**

This quality seal is awarded to agricultural products that have passed a comprehensive DLG usability test. In this test, all features of a product that are considered relevant for day-to-day use are objectively assessed. The quality seal is valid for five years from the date of issue.

## **DLG APPROVED specific criteria**

This quality seal is awarded to agricultural products that have passed a less comprehensive DLG usability test. The purpose of the test is to highlight a product's specific innovations and key features. The test may include criteria laid down in the DLG test framework for Full Tests or focus on other features and characteristics that confer a specific

value to the product. The quality seal is valid for five years from the date of issue.

# **DLG Quality Seal**

The DLG Quality Seal is awarded to farm inputs. All inputs that bear a DLG Quality Seal are subject to continuous auditing. Repeat tests and audits are conducted by the manufacturer at least once a year to ensure consistent product quality.



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FULL TEST

MANUFACTURER PRODUCT

DLG Certificate 0000