DAkkS
Deutsche
Akkreditierungsstelle
D-PL-15110-01-01

SLG Prüf- und
Zertifizierungs GmbH

About us

We are a testing institute with long-term experience in testing and certification of products and systems.
We provide comprehensive services including information on the requirements applicable for your product or system, standard research, testing, certification and follow-up services.

Our main fields of testing:

- Safety
- Electromagnetic compatibility
- Fitness for use and energy efficiency
- Reliability and environmental simulation
- Technical acoustics, shock and vibration
- Applied physics and radiation protection
- Chemical analysis

Other services:

- Calibration
- Design and construction of test equipment

Certification:

- National and international certification of products
- Certification of QM /QA systems

Contact

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Do you have any questions? We will be pleased to advise you:

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Our Asian branch offices:

SLG Technology Service Shanghai Co., Ltd.
SLG Technology Service Hong Kong Co., Ltd.
SLG Asia Test Labs & Service (HK) Ltd.
SLG-CPC Testlaboratory Co., Ltd., Dongguan

Please, visit our website at **www.slg.de.com** for more information on our services.

Environmental simulation






Environmental simulation during R&D saves costs

All products are exposed to a multitude of environmental impacts during their entire life cycle, e.g. while being transported, stored and at their future point of use. Environmental stresses include temperatures and climatic conditions, water and dust as well as mechanical stresses like vibrations and shocks.

Environmental simulation tests offer valuable information in advance on whether a product can withstand such impacts and whether it is suitable for its intended point of use, i.e. will function properly.

By testing during the R&D stage potential weak spots, which later may result in a product failure, can be detected and eliminated early preventing expensive product failures, customer complaints and recalls at the worst.

So-called life-cycle tests provide information on the product's reliability during its future use. By subjecting the product to the environmental conditions it will be exposed to later, an accelerated life-cycle is simulated. The causes of early and late failures are analysed, thus, providing manufacturers the opportunity to substitute components susceptible to failure and further improve their products.

Environmental simulation tests at SLG

Mechanical tests

- Vibration tests
- Shock tests
- Free fall tests

Climatic tests

- Temperature tests (cold, heat, change of temperature)
- Climatic tests (damp heat, climatic sequence)

Composite tests

- Vibration and shock tests under defined climatic conditions (temperature or damp heat)

Other tests

- Tests for degree of protection (IP code) (EN 60529, DIN 40050 part 9, ISO 20653)
- Tightness tests
- Low-pressure tests
- Tests with salt mist and polluting gas
- UV tests

Product groups

Subassemblies, components and devices from the automotive, railway, shipping, industry, consumer and outdoor sector

SLG test facilities for environmental simulation

- Climatic test cabinets and walk-in climatic test chambers (temperature range -75°C to +180°C, temperature change up to 15K/min)
- Vibration and shock test equipment with slip table including climatic test chamber for composite tests under defined temperature and humidity conditions
- Low pressure test chamber up to < 10mbar
- Test equipment for degree of protection for protection against water IPX1 to IPX8
- Special test equipment IPX4K and IPX9K
- Dust test chamber for degree of protection IP5X and IP6X

Accreditations and expertise

Our skills and expertise in environmental testing are monitored and assessed by the national accreditation body of Germany (DAkkS).

Furthermore, we are a long-time member of the German Society for Environmental Engineering (GUS).

Just present us your product. We gladly support you in drawing up a tailored test plan based on national and international standards as well as according to customer specifications.