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# COMPONENT TESTING

In our modern vibration test laboratory we test your products regarding their behavior and reliability during vibration and shock loading according to standards. We determine operational stabilities of materials and components as S/N curves.

# **Our comprehensive service portfolio**

# **Vibration testing**

Sine sweep, random, overlapped stimulations, resonance dwell

Frequency range	13500 Hz
Force vector	to 60 kN
Test acceleration up to	140 g

## Shock testing

Half-sine, sawtooth, trapeze, shock response spectrum (SRS) a.o.

Peak acceleration Shock duration 200 g 1 ... 50 ms

### **Specimen mass**

horizontally stimulated up to 2000 kg vertically stimulated up to 1000 kg

# **Climate testing**

Useable volume up to	1 m <sup>3</sup>
Temperature range	-70 … +180 °C
Relative humidity	1098 %
Temperature shock	-80 °C +220 °C

Vibration and shock tests also combined with temperature and humidity loading

# **Typical test standards**

# Environment

DIN EN 60 068 Environment tests DIN EN 60 721 Classification of environment conditions

### Aerospace

MIL STD-810 Test Method Standard for Environmental Engineering Considerations and Laboratory Tests RTCA/DO-160 Environmental Conditions and Test Procedures for Airborne Equipment

### **Rail vehicles**

DIN EN 61 373 Equipment of rail vehicles

# **Road vehicles**

ISO 16750-3 Road Vehicles - Mechanical Loads VW 800 00 / VW 801 01 Electrical or electronic components in vehicles VW 802 00 Attachment parts, body attachments BMW GS 95003 Electric-/electronic-assemblies in vehicles

### **Transportation and packaging**

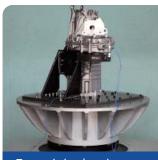
DIN EN 60721-3-2 Transport DIN EN ISO 2247 Ready-to-ship packages ETSI EN 300 019 Telecommunication

# **Our competences**

- Accredition for vibration testing according to standards
- Flexible accredition for modification and new development of test procedures
- Long-standing research activities in the field of material science and testing
- Complex cooperation with other test laboratories in our company
- Sonic Fatigue Test
- Development accompanying validation tests
  Vibration testing with temperature
  - Vibration testing with temperature
  - Pressure pulse testing
  - Burst pressure testing
  - Probit test
  - Determination of Wöhler lines
  - Stair case method
  - Fuel resistance
  - Temperature shock
  - Climate testing
  - Leak test









Transmission housing

Toilet module aerospace



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