

Environmental Testing

The use of state-of-the-art technologies and the increasing requirements for product reliability have intensified the need for advanced environmental testing. Our environmental testing laboratory has the equipment necessary to perform the broad range of tests required.

We simulate environmental impacts, such as transport and operating conditions, on various products to assess their operating reliability. We simulate extreme temperatures and humidity in various combinations, vibration loads, shocks, exposures to salt mist, or/and low atmosphere pressure, either separately or in different combinations, and in line with:

- International and European families of standards IEC/EN 60068 and IEC/EN 60721, and standard IEC/EN 60529, as well as similar standards;
- Requirements of individual industry sectors (MIL standards, requirements for the automotive industry, and similar standards);
- Manufacturers' specifications.



What can we do?

Mechanical Exposures and Tests

- Vibrations: accelerations up to 981 m/s², frequencies from 5 Hz to 2,000 or 4,000 Hz, loads up to 500 kg:
 - Exposure to sinusoidal vibration;
 - Exposure to random vibration;
 - Exposure to pulse vibration;
 - Resonance search;
 - Frequency analyses;
 - Functionality tests.
- Shocks: accelerations up to 3,000 m/s².
- Free-fall tests.

Climate Exposures and Tests

- Humidity exposures;
- Salt atmosphere tests;
- Dust resistance tests;
- Pressure tests: up to 8 mm Hg of absolute pressure.

Degrees of Protection Provided by Enclosures

- From ingress of solid foreign objects (IP code X: from 0 to 6);
- From ingress of water (IP code Y: from 0 to 8);
- From mechanical impacts (IK code: from 00 to 10).

Combinations and Simultaneous Exposures

- Tests/exposures can also be performed in various combinations:
 - Temperature and humidity (constant or cyclic);
 - Vibrations (under controlled temperature conditions);
 - Pressure and temperature exposure.
- All listed exposures/tests (single or in combination) can be performed under a device's operating conditions, as well as under simulated transport and storage conditions.

Contact