

Mechanical testing

It is inevitable that both consumer devices and industrial electronics will be exposed to intentional and unintentional mechanical effects during their lifetime. By performing mechanical testing we can help you find the weak points in your product before your customers find them.

Vibration, bump, and shock

Using our electrodynamic shaker we can expose equipment to mechanical stresses encountered during transportation or mounted in vehicles, trains, ships, and airplanes. We are accredited to many standards within this area and can also handle special customer specifications. The capability of our shaker is 26 kN, 2-2000 Hz, 1.4 m/s and 800 m/s (80 g). The mechanical exposures can be combined with climatic exposures in a 1 m³ climatic chamber, which can be mounted on the shaker in both horizontal and vertical axes.

Guided free fall

Our fall test facility can be used for both free fall and guided free fall testing. This test is important for evaluating the reliability of portable equipment and packaging material. Various fall surfaces can be used, e.g. steel and wood. The fall height is limited to 250 cm and the weight to 10 kg. Furthermore, high-speed video of the impact is used for evaluation of failure mechanisms.

Materials testing

We have facilities for testing the mechanical properties of materials by pressing, stretching, twisting, bending and rubbing. These exposures can also be used for accelerated mechanical testing of products or parts, e.g. printed circuit boards or touch displays. We can handle loads up to 250 N and have the capability of making special fixtures adapted to the test.

Static load and impact testing can also be made for e.g. safety investigation according to the Low Voltage Directive (LVD).

Mechanical analysis

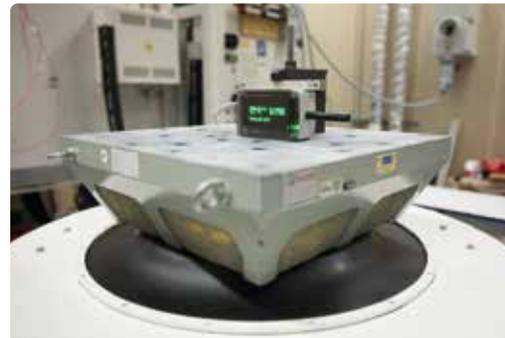
In combination with the mechanical testing, we can perform additional analyses during testing by using high-speed cameras, resonance and modal analysis (noncontact).

What is DANAK?

DANAK is the national accreditation body in Denmark, appointed by The Danish Safety Technology State Authority. DANAK checks and verifies the company's processes, routines, procedures, and the employees' competencies. Furthermore, DANAK verifies that equipment is calibrated, and checks that measuring results are reliable and accurately recorded.



One example of materials testing is steady force, which is part of our safety analysis of electronic devices



In our large mechanical test facility we can conduct vibration, bump and shock testing of small and large devices



EKTOS TRS is accredited by DANAK. We provide the necessary basis for approvals in most countries worldwide

Want to know more?

Contact EKTOS Testing & Reliability Services for more information about accredited or non-accredited testing in Copenhagen and Struer

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