

Military/Aerospace Testing Services



What Is Military / Aerospace Testing?

With the extreme operating conditions and exposures of military and aerospace hardware, specialized testing has been developed to ensure that equipment is highly-reliable while meeting safety and functionality requirements. These tests include vibration, mechanical shock, temperature, humidity, altitude, thermal shock and others that stress the product while in the laboratory environment.

Why Is This Testing Important?

Testing is often utilized to identify design flaws by simulating the environment the hardware is expected to encounter during its service life. In these cases, testing becomes a vital component of the product development process. Another use of testing is to identify defects in materials and manufacturing processes. High quality assurance levels can be achieved when tests are properly designed and executed.

How Is This Testing Conducted?

Testing is conducted to meet Military (MIL STD), RTCA (Radio Technical Commission for Aeronautics), company-specific standards, and others. Test protocols are generally based on the end-use environment of the hardware and specify test inputs that exceed the expected in-use exposures.

How Can Westpak Help In This Area?

Westpak's Military/Aerospace Division draws on the considerable expertise of a substantial and well-educated engineering staff plus the capabilities of calibrated test equipment that meets or exceeds requirements. In addition, our ISO 17025 accreditation ensures the highest quality data possible of any testing facility. Combined with our critically acclaimed customer service, Westpak offers clients a convenient source for high quality testing, competitive pricing, and short lead times.

Military/ Aerospace Tests

- Mechanical Shock
- Mechanical Vibration
- HALT / HASS
- Temperature Extremes
- Humidity Extremes
- Thermal Shock
- Altitude / Pressure
- Salt Fog
- Packaging Testing

Westpak's ISO 17025 accreditation assures you of the highest quality testing and data provided by any testing laboratory.

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Vibration and Mechanical Shock

Intense vibration and mechanical shock exposures will occur during the product's life cycle and at varying levels of intensity. Westpak has several vertical and horizontal shock and vibration tables that are capable of running dozens of standard test inputs.

Temperature, Humidity and Thermal Shock

Environmental conditioning is a process of subjecting a test specimen to various temperature, humidity, and pressure conditions in order to determine the effect these conditions have on equipment operation and performance. Westpak has over 70 test chambers, including temperature, humidity, pressure and thermal shock.

Typical Test Procedures

MIL-STD-202
MIL-STD-810
MIL-STD-883
MIL-STD-3010
RCTA-DO-160
49 CFR Part 178



Other Environmental Tests

Test standards define dozens of conditions covering a wide scope of environmental hazards. Westpak has the capability and experience to test to a significant number of these including ingress protection, salt fog, combined environments (e.g. temperature and altitude, vibration and altitude), and others to industry standard and proprietary requirements.

Packaging Testing and Certification

Westpak has a full transport-packaging test laboratory for testing both single parcel and pallet/crate shipment containers. Westpak also offers dangerous goods packaging certification for products which fall under the guidelines of 49 CFR.



Note from Aaron Suarez, Director of Engineering

"Westpak's testing resources are top-notch and of the highest quality."



Note from Andrew Thomas, Laboratory Manager

"Westpak has the testing capabilities and experience to provide our customers accurate testing of their product."



For more information or a quote, please contact one of our offices below or go to: www.westpak.com/contactus.aspx

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