

# Vibration and Shock Testing

Today vibration & shock testing has become an inherent part of any new development, be it Manned Space flights, Ships, Rail transit Satellites, Missiles, Wind Turbines on one hand to the micro PCB's & components on the other.



Vibration testing emerged in the early 1960s as electronics systems became more complex and widely available. Vibration comes in many forms – good, bad, sinusoidal and random to name a few. Although the first two may be more subjective than the latter. Vibration testing of components is conducted to determine the modal parameters such as natural frequencies, dampings, and mode shapes ; To verify an analytical model; To determine dynamic durability: shock test, drop test, operating life test and To continuously monitor machine condition.





Today vibration and shock testing has become an inherent part of any new development, be it Manned Space flights, Ships, Rail transit Satellites, Missiles, Wind Turbines on one hand to the micro PCB's and components on the other. The challenge is in testing for reliability in harsh environments and in long mission profile. It is proven that vibrations and shocks cause some several percent of the mechanical failures. Shock and vibration tests are an essential step to the assurance of relevant quality and reliability. There is described an approach to vibration testing of the new designed configuration including vibration simulations. This results help to designers to choose the optimal configuration including placement of components and to avoid later problems in the application area.

Our overseas associates believe in the philosophy of concept, technological and model innovation to create a customer centric response mechanism. They been certified with CNAS, DILAC and other standards and are fully equipped to offer solutions for large load, large displacement, low frequency, slender specimens, reverse stress compensation, ultra high frequency, dual slip tables and one-drive-two tests.

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