



FORCE Technology transportation test lab

Vertical vibration test system

What is transportation vibration used for ?

- Vibration Test Systems are by simulating the vibration effects of product transportation used to evaluate products and packages designs.
- The FORCE Technology transportation test lab's Vibration Test Systems is easy to use and perform a wide range of vibration testing in accordance with government, industry and corporate specifications.



Impact on pallets, packages – and prevent product damage

- During transportation, the packaged goods experience different types of hazards which may affect its content and integrity. Movements during load and unload, vibrations in the vehicle and horizontal accelerations/decelerations incurred in transport by road, train or sea damage and deform packaging inducing safety risks during transportation and handling.
- In order to prevent and avoid these problems, it is advisable to perform a test which reproduces the vertical vibrations experienced.
- With the equipment in the FORCE Technology transportation test lab it is possible to validate that the design of packaging whether big or small can withstand the impact of movements during transport.



What can the FORCE Technology Hydraulic vibration tester do?

- The FORCE Technology hydraulic tester with its test table of 152x152cm (60x60") can take big units or complete EU pallets for testing. It can as an option be tested with a calibrated top load (ex 1000kg) simulating that it has the lowest position in the transporting vehicle. The system table as such can carry up to 2500kg, and the vertical movement can be up to 100mm (stroke), in the range of 1-300Hz which is quite an impact on transport packaging.
- The level of the impacts and the duration of such tests are of course fully described in international standards such as ISTA or ASTM which is more and more in demand. Optional; ISTA certified test reports.
- The transport quality requirement typically starts from the end customer who will not accept a defect product.
- A defect product caused by a weak packaging will cause a demand in the first hand on the transport logistic which then transfer the requirements to the manufacturing company of the product and in the end to the designer of the packaging and the test of it.
- This is where the FORCE Technology Transportation test lab can assist companies in securing a safe arrival of products to the end user, and minimize the quality cost for the manufacturer.



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Sample test –

- Deformation of boxes after only a few minutes testing!
- Severe risk of pallet tower stability!

