

# Vibration testing

Vibrations from a ships engine or from driving a vehicle on a bumpy road are examples of reasons for fatigue that causes failure in mechanical and electrical systems.

## Vibration occur in:

- Routine shipping and handling
- Transportation
- Mounting of your equipment on a ship's bulkhead, in mechanical contact with engines etc.
- Normal operational environments of ground vehicles and aircrafts

Nemko's vibration testing facilities contains 3 electrodynamic shakers where the largest provide a continuous force in excess of 100 kN for the most used vibration testing events – sine and random vibration analysis.

We can combine several systems to simulate your anticipated vibration testing conditions, like mechanical vibration combined with various atmospheric/climatic conditions.

The effects of vibration over a wide range of frequency and acceleration levels can be simulated according to IEC 60068-series.

## Non-exhaustive scope:

- IEC 60068-2-6
- IEC 60068-2-64
- IEC 60945
- Maritime Classification Society specifications
- Offshore
- Subsea
- Medical Equipment
- Railway
- Other

## Tests:

- Sinusoidal Vibration
- Random Vibration
- Sine on Random Vibration
- Combined vibration with cold/heat/humidity

## Specifications:

- Frequency Range: DC-2700Hz
- Max Force: 105 kN
- Max Acceleration: 150g
- Max Weight: 1000 kg

Related information

[IP - Ingress protection](#) [1]

[Climatic testing](#) [2]

[Mechanical stress](#) [3]

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