

## Long-stroke Vibration Generator with Climatic Chamber

### Key words

Low frequency vibration testing, long-stroke servo-hydraulic actuator, vibration generator, seismic simulation, climatic testing

### Fields of application

Simulation of earthquake vibration or transportation vibration combined with climatic loading

### Methodology and instrumentation

Long stroke servo-hydraulic actuator with large climatic chamber, vibration control system for sine, shock, random and MixedMode control

### Items tested

Parts and components of vehicles, security relevant parts of power plants, earthquake safety systems, packages; max. specimen mass 1000 kg; max. volume of specimen 1 m<sup>3</sup>

### Quantities / characteristics tested

Stroke: max. 400 mm, frequency:  $\leq 100$  Hz

Temperature range: -60 °C to +180 °C, humidity range: 10 % to 95 % r.h. (temperature range +10 °C to +95 °C)

### Uncertainty / reliability of results

Test results qualitative, measurement uncertainty of acceleration 3 %

### Qualification and quality assurance

Unique testing facility in Europe for the combination of long stroke vibration and climatic loading  
Accreditation valid for vibration, shock and climatic testing

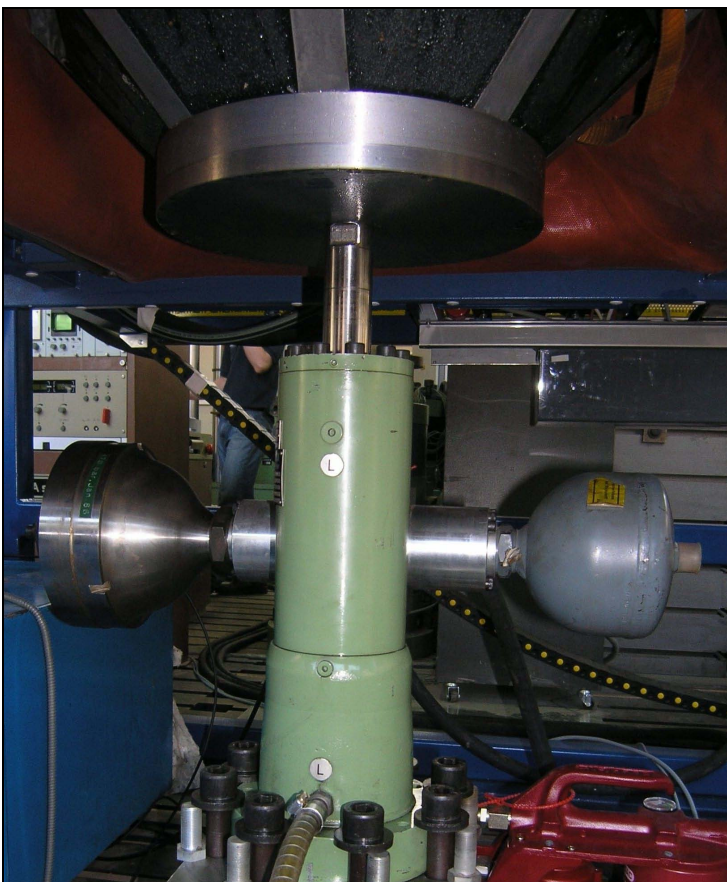
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**Further information**

**Long-stroke vibration generator with climatic chamber**



*Fig. 1: Climatic chamber with test sample at -18 °C*



*Fig. 2: Long-stroke vibration generator below climatic chamber*