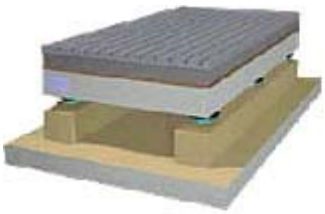
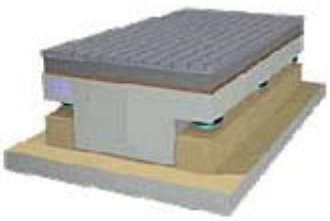
Suspended Seismic Mass

- Decouple Seismic Mass and surrounding floor/test areas effectively
- Eliminate vibration emitted by your test system into the neighboring test areas
- Eliminate vibration coming from the neighboring test areas into your test system
- First Natural Frequency between 0.8 and 1.2 Hz
- Seismic Mass always leveled with Level Control System
- Maintenance free air spring system with no fatigue
- From 30 tons to 1000 tons and more

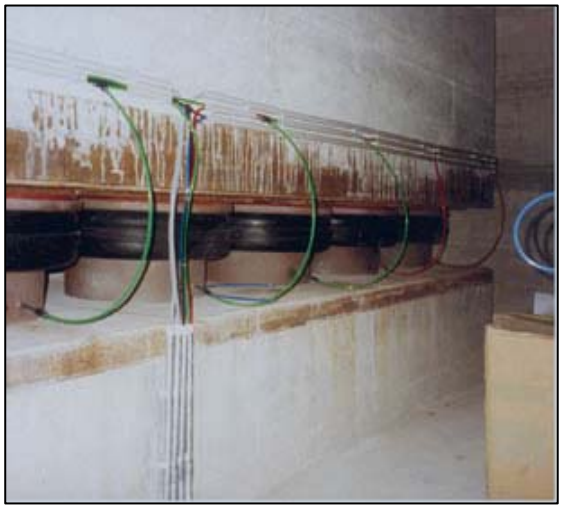


Seismic mass with rectangular cross-section

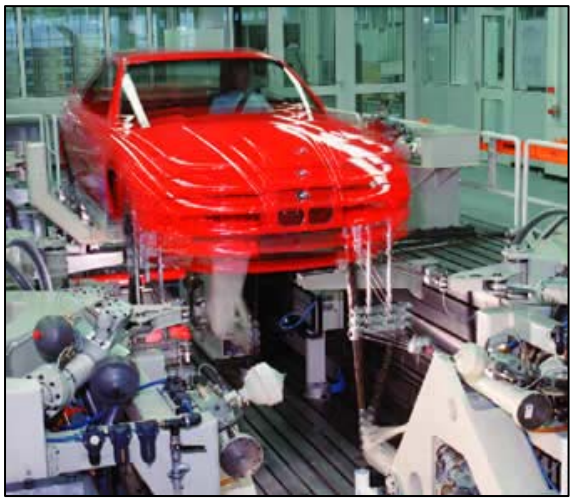


Seismic mass with T-shaped cross-section

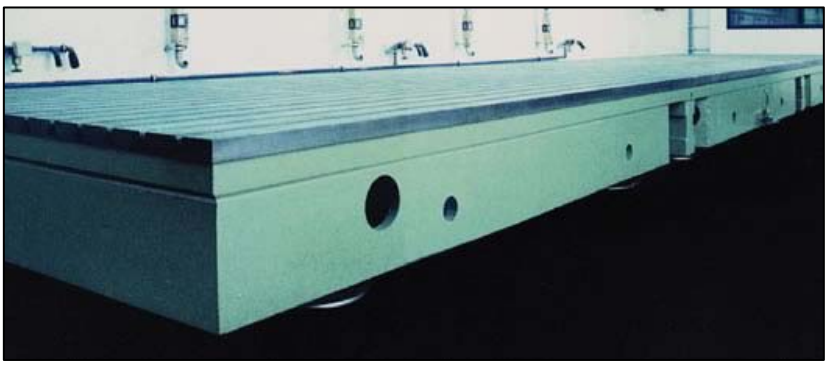
Seismic mass with conic-shaped cross-section



600 to Seismic mass on CFM-Schiller GRB air springs. Natural frequency approx. 1.2 Hz



Isolated seismic mass with floor plate and dynamic test equipment acting on a car body.



Air spring mounted floor plate 12 x 2 m (40' x 7') for a gear box test rig

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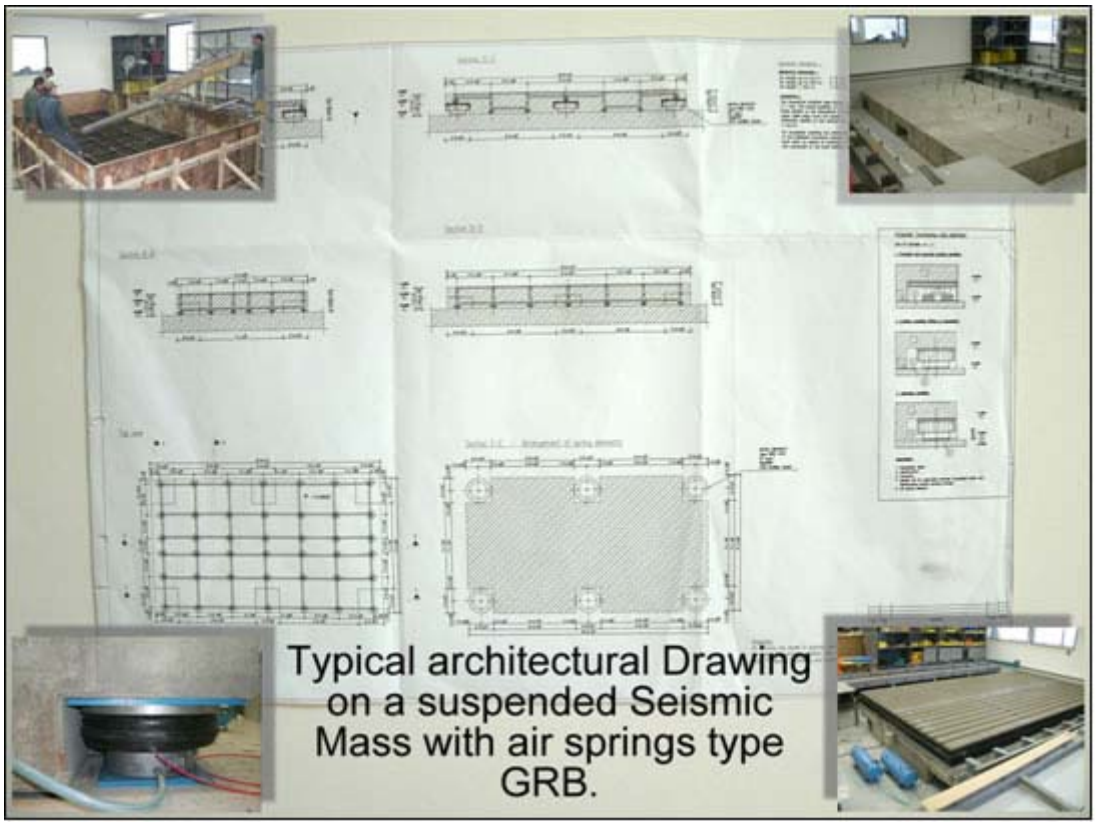
Elements of a suspended seismic mass or floor plate

Layout and Planning:

We provide:

- Seismic Mass Layout
- Form Work drawings
- List of materials
- Communication with your Architectural firm



Customer should provide:

- Architectural firm for providing the labor
- Soil Analysis to insure the proper support of the seismic mass
- Excavation
- Formwork
- Rebar System
- Concrete Work

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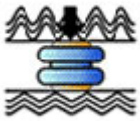
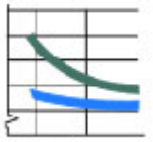
Air Springs

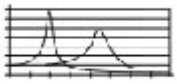


1. Excellent reduction of vibration
As a compressible cushioning medium, air provides a very low degree of spring stiffness, i.e. a very "soft" cushion. The system's inherent frequency lies below 3 Hz - when combined with auxiliary volumes even well under 1 Hz. There is a higher degree of isolation even for low inherent frequencies.

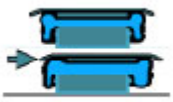
2. Constant design height
The operating height of CFM-Schiller air springs can be adjusted via the air pressure, regardless of the load capacity. There is no static deflection as with other spring components. A user-friendly, automatically functioning control system guarantees a uniform operating height, even in the case of alternating loads.



3. Load dependent isolation properties
The spring stiffness is proportional to the load capacity. The vibration isolation is virtually independent of the carrying force, i.e. constant inherent frequencies even with fluctuating loads. The broad load range of CFM-Schiller air springs provides possibilities for standardizing the spring types in assembly families.



4. Avoiding of resonance effects
CFM-Schiller air spring suspension systems can be designed with two inherent frequencies so that resonance can be avoided when the excitation frequency undergoes constant changing due to switching.



5. Lateral stability
CFM-Schiller air springs have very good lateral stability.

6. Low overall height
CFM-Schiller air springs have a very low installation height.

7. Isolation of structure-borne noise
CFM-Schiller air springs provide a very high degree of structure-borne noise isolation.

8. Maintenance-free and long service life
CFM-Schiller air springs are made of materials of high dynamic strength. CFM-Schiller materials are resistant to environmental influences and aging factors.

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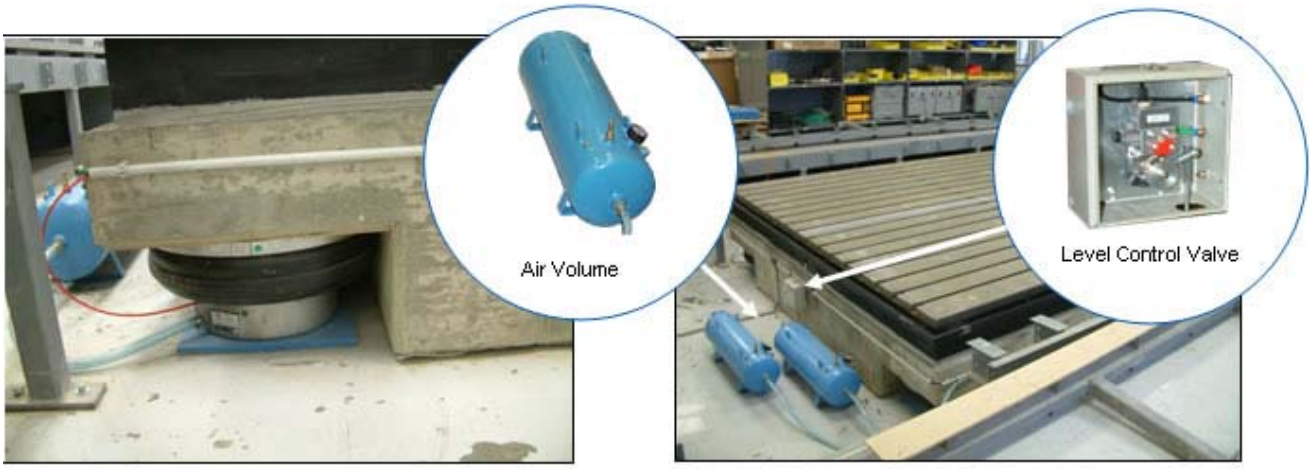
Air Spring Type GRB available in load capacities from 7,800 kg (17,500 lbf) to 24,800 kg (55,750 lbf)



Air Spring GRB with additional air volume attached for reduction of the 1st natural frequency from 1.2 Hz to 0.8 Hz. View on one of the three level control valves attached to the side wall of the seismic mass.

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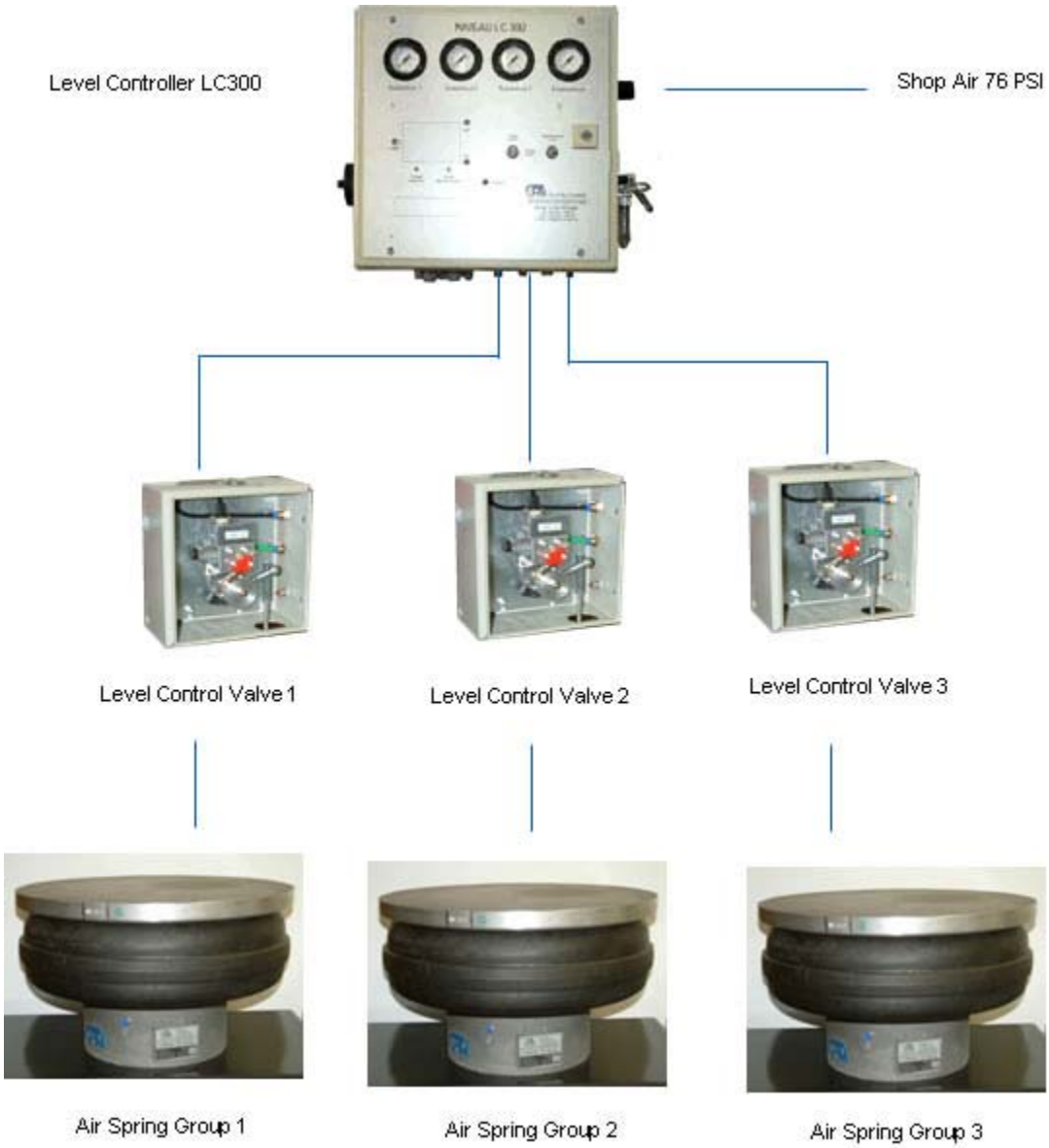
Level Control System

Consisting of #1 Level Controller and #3 Level Control Valves, air hoses and connectors



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