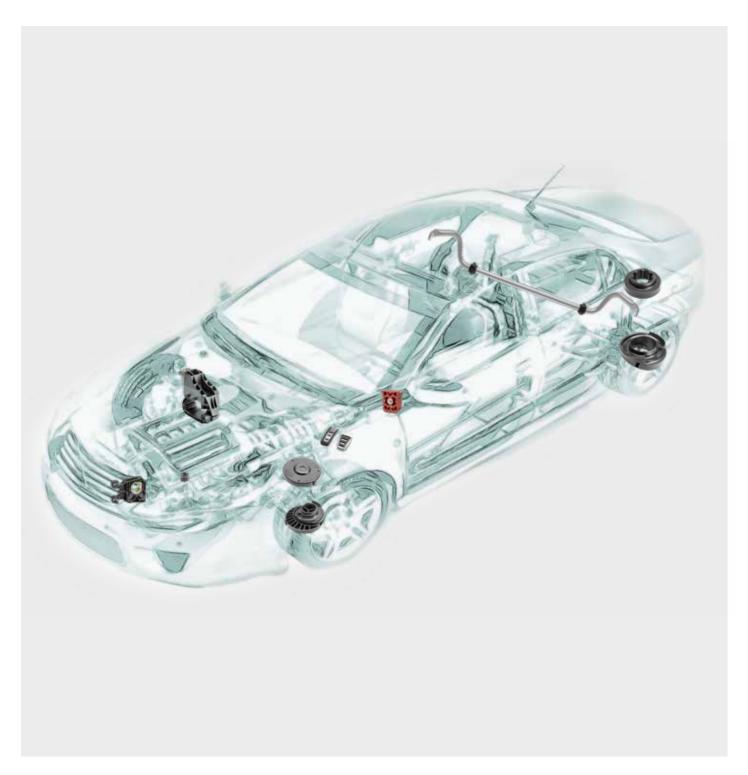


# **Damping**

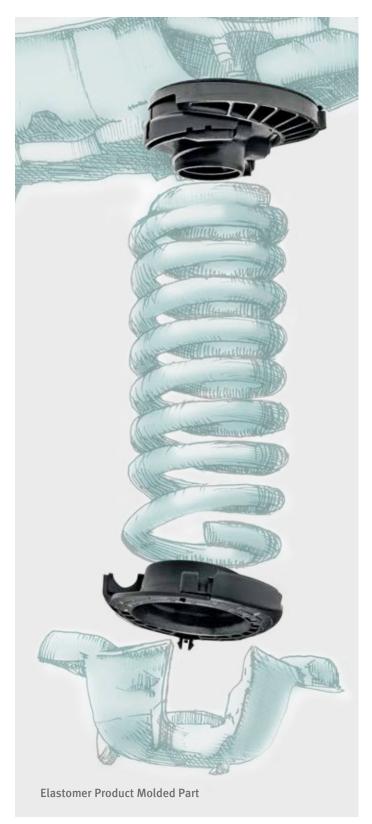
Damping in interaction with material and process.



## **Material and Process Expertise**

60 years of experience in the fields of materials and processes and a wide product range of classic applications in sealing and silencing are the foundation of Woco elastomer technology. In addition to development, our own production of elastomer materials with specific property profiles is an outstanding,

unique selling point. Polymer Automotive products isolate vibrations, seal in the drive and chassis areas and improve vehicle comfort.





#### **Spring Seats**

Spring seats are components that isolate steel springs at their contact points to the body and are, therefore, subject to highly dynamic stress. They are used in the chassis for damping vibrations and have a major influence on driving comfort and dynamics.

Their most important characteristics include:

- Improved driving comfort
- Reduction of disturbing vibration
- Corrosion protection of the springs through zinc-titanium sacrificial anode

### A Functional Solution for Reducing Vibration and Noise

The product division Silencing develops and produces functional solutions for applications in which vibration and noise must be reduced. Due to expert knowledge in functions and materials and expertise in handling the widest variety of plastics, Woco develops an increasing number of system

solutions that not only silence, but also fasten, stiffen and guide. By using innovative materials, Woco offers its customers optimum products and functional solutions. Especially for polymer materials, Woco is characterized by in-house development.



#### **Radiator Mounts**

The multi-component radiator mounts support the static and dynamic loads of the various radiator modules of a vehicle series. The modular design of the mounts allows different elastomer springs to be combined in such a way that the required natural frequencies of the oscillating system are realized for each radiator weight. By means of adjustable material parameters, the dynamic properties of the mounts are designed to achieve an optimal isolating effect.

Their most important properties include:

- Ability to bear static and dynamic loads
- Modular system provides high variability
- Optimal vibration isolation



#### **Stabilizer Bearings**

Stabilizer bearings contribute significantly to a vehicle's movement dynamics and driving comfort. For this purpose, the mostly two-part elastomer bearings are connected to the stabilizer, either by adhesion, clamping or sliding, in each case acting as a torsion spring which, by means of connecting rods, interlinks the left and right wheel carriers of an axle, thus reducing the rolling behavior of the vehicle body. Here, the stabilizer bearings absorb the forces and moments resulting from the stabilizer movement and at the same time serve to isolate the disturbing vibrations resulting from road surface excitation.

Their most important properties include:

- Bearing the static and dynamic forces and moments
- Isolating the vibrations caused by road surface excitation
- Multiple connection options to the stabilizer



#### **Isolators**

Isolators serve to reduce the transmission of disturbing vibrations to a minimum. On the one hand, vibration-producing components, such as pumps, compressors or valves, are isolated from the surrounding structure to prevent the transmission of disturbing vibrations. On the other hand, sensitive components, such as control devices or other electronic components, are mounted on elastic isolators to protect them from damaging vibrations.

Their most important properties include:

- Bearing the static loads
- Reduction of the vibrations transmitted into surrounding structures
- Wide range of application due to adjustable properties

#### Woco Industrietechnik GmbH

Hanauer Landstrasse 16 | 63628 Bad Soden-Salmünster | Germany Phone +49 6056 78-0 | Telefax +49 6056 78-7212 info@de.wocogroup.com | www.wocogroup.com





### The Woco Group Worldwide

Woco is where the customer needs Woco to be.

Woco develops and produces future-oriented technologies based on innovative material, product and process solutions. We achieve our goals by continuously identifying and evaluating trends in markets and technology and through the consistent benchmarking of products, processes and materials. Through close cooperation with universities and research institutions and

continuous exchange and transfer of knowledge with our internal departments, the Woco Group develops market-oriented, future-proof functional solutions for automotive power train and vehicle body. The global presence of the Woco Group ensures proximity to our customers and markets and their specific requirements.