PRESS RELEASE  
30/06/2025  
 **Getzner presents earthquake-proof machine bearing**

**New Isotop DZE 3D for protecting building systems**

**Buers (AT). Vibration protection expert Getzner Werkstoffe is expanding its portfolio to include an earthquake-resistant bearing specially designed for building services installations in exposed locations. Isotop DZE 3D fulfils all seismic requirements and, for the first time, can dampen horizontal forces as well as compressive and tensile forces. It ensures machines and systems are securely anchored, including in the transport sector.** **The innovative chamber design is protected by a European patent.**

A vibration-damping machine bearing, explicitly developed technical systems in wind-exposed locations and earthquake regions, is a new innovation. The Isotop DZE 3D vibration damper absorbs load influences such as earthquake shocks and external forces, like those generated during braking, remaining completely unscathed. It also serves to securely anchor the equipment in place. “Strong winds often exert alternating lateral pressure, for example on a heating, ventilation or air conditioning (HVAC) system on the roof. The Isotop DZE 3D bearing effectively offsets this,” explains Dominik Riedel, Technical Manager at Getzner Spring Solutions. “The machine bearing successfully compensates for strong lateral displacements and has even been proven to withstand earthquakes without incurring any damage. This plays an important role in protecting the machinery or equipment being borne. Its properties also make it ideal for use in the transport sector.”

**Load capacity far beyond standard limits**

The vibration damper’s high load-bearing capacity has also been confirmed by independent experts. The recognised testing institute for seismic requirements EUCENTRE (European Centre for Training and Research in Earthquake Engineering) in Pavia, Italy, carried out a series of earthquake simulations. After the Isotop DZE 3D bearing had survived the load limit of the earthquake simulator unscathed, further inspections did not reveal any visible damage or significant deformation whatsoever. Getzner has also tested the elements up to plastic deformation in its own laboratory in order to be able to offer maximum safety. “With this Isotop product, the anchored objects can move sideways to an unprecedented extent without sustaining damage. The bearing always returns to its original position,” emphasises Rico Link, Project Engineer at Getzner Spring Solutions GmbH.

**Patented chamber design**

The high level of vibration protection is achieved thanks to the innovative design. Trademarked materials developed by Getzner which have been proven in the field for decades form the basis of the new product. A patented chamber design provides space for Sylomer, Sylodyn and Sylodamp inserts, effectively preventing the transmission of vibrations. The internal structure of the Isotop DZE 3D allows the threaded rod, with which the machine bearing is bolted to the object to be protected, to be set at a considerable angle: an inclination of up to 35 degrees is possible without creating sound bridges. “Even a larger inclination is not a problem. Although the vibration-insulating effect is then no longer present, the machine bearing is not damaged,” says Dominik Riedel. This is because Getzner has completely dispensed with bolt or rivet connections, which could break under load. What’s more, the housing is also made of solid die-cast stainless steel.

“Isotop DZE 3D protects elastically mounted machinery perfectly against external influences such as wind or earthquakes. The bearing can easily absorb high horizontal accelerations,” emphasises Dominik Riedel. Isotop DZE 3D is available as standard in four types with different load limits, from 200 kg to 1,200 kg per element, and is available for immediate delivery.

**Image 1:** DZE 3D portfolio.jpg **Caption 1:** The Isotop DZE 3D vibration damper also protects against horizontal forces, offering maximum safety for the mounted devices.  
**Image source 1:** Getzner Werkstoffe, may be published free of charge

**Image 2:** HVAC rooftop.jpg **Caption 2:** Isotop DZE 3D has been specially developed for use with HVAC units and other systems in wind-exposed locations.  
**Image source 2:** Getzner Werkstoffe, may be published free of charge

Click here to view the [**press kit**](http://www.getzner.com/en/press/getzner-presents-earthquake-proof-machine-bearing)

**Getzner Werkstoffe GmbH**

[Getzner](https://www.getzner.com/en) is the leading specialist in [vibration isolation](https://www.getzner.com/en/about-us/who-we-are) in the [railway](https://www.getzner.com/en/applications/railway), [construction](https://www.getzner.com/en/applications/construction) and [industry](https://www.getzner.com/en/applications/industry) sectors. The innovative solutions are based on the materials [Sylomer®](https://www.getzner.com/en/products/sylomer), [Sylodyn®](https://www.getzner.com/en/products/sylodyn), [Sylodamp®](https://www.getzner.com/en/products/sylodamp), [Isotop®](https://www.getzner.com/en/products/isotop) and [Sylocraft®](https://www.getzner.com/en/products/sylocraft), which the company has developed and produces itself. They reduce vibrations effectively, improve the service life of bedded components and thereby minimise the need for maintenance and repairs on transport routes, vehicles, buildings and machines. Through sustainable vibration isolation, Getzner is making a valuable contribution to improving quality of life and reducing noise pollution for people and the environment.

Getzner Werkstoffe was founded in 1969 in Buers, Austria, as a subsidiary of Getzner, Mutter & Cie., and sells products and individual solutions worldwide. Alongside its locations in Germany, Getzner also has offices in Australia, China, France, India, Japan and the USA. Its own international network is complemented by sales partners in 40 other countries around the world.

**Facts and figures – Getzner Werkstoffe GmbH**

Founded: 1969

Chief Executive Officer: Juergen Rainalter

Employees: >500

Turnover in 2024: EUR 154 million

Business areas: Railway, construction, industry

Headquarters: Buers (AT)

Locations: Melbourne (AU), Beijing, Kunshan (CN), Munich, Berlin, Stuttgart (DE),   
Lyon, Paris (FR), Pune (IN), Tokyo (JP), Charlotte (US)

Ratio of exports: >90%

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