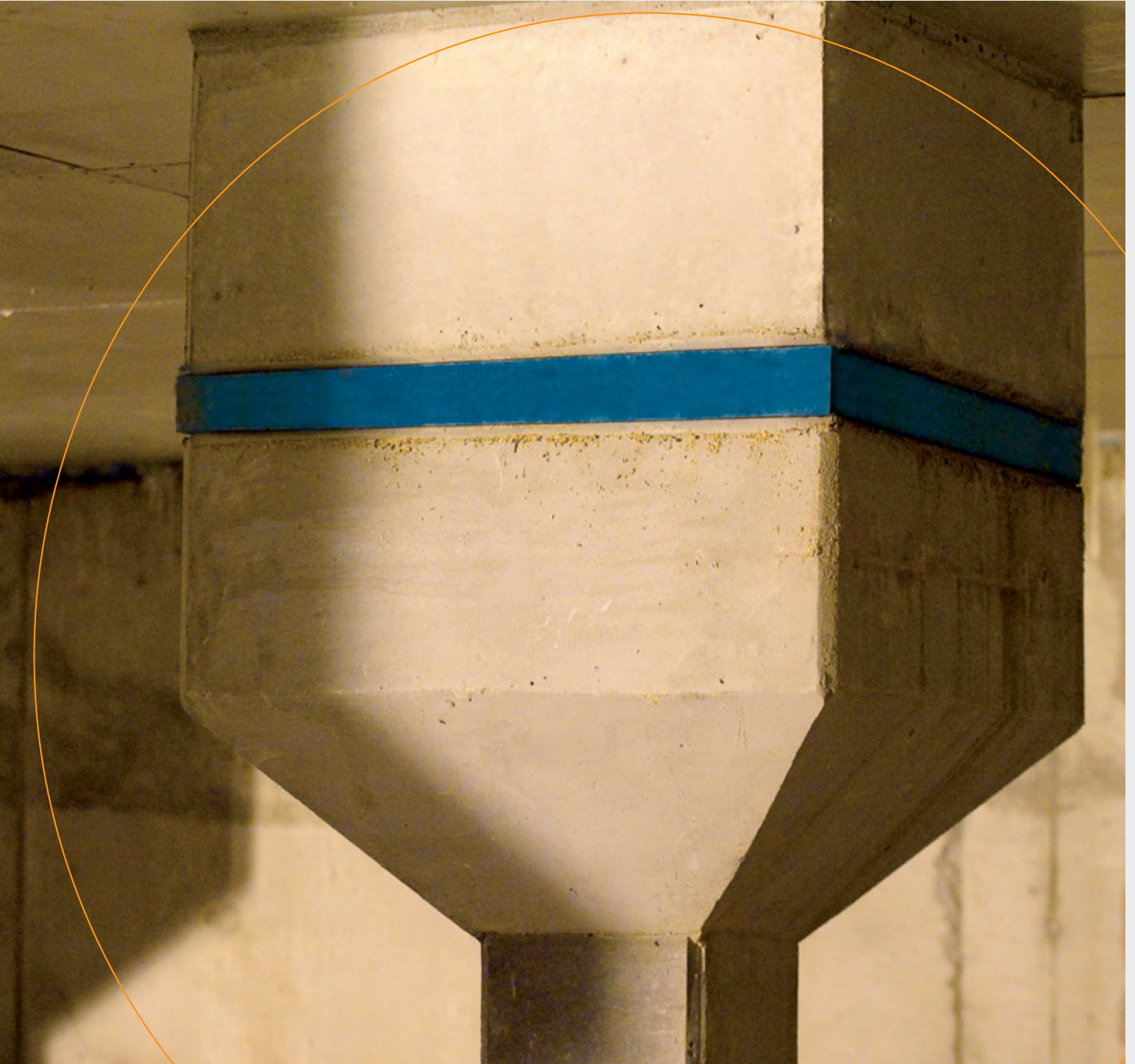


# High-Resilient Bearings

Efficient vibration insulation  
in minimal space



# Applications and advantages of high-resilient bearings



## Efficient supporting of heavy weights

**Getzner Werkstoffe has developed a new product to simplify elastic supporting of heavy loads in situations with design constraints.**

**T**he high-resilient bearings isolate vibrations and concussions in structures extremely efficiently, even while taking up minimal space.

**M**any buildings, such as high-rises, must be supported on elastic bearings in order to efficiently protect them from vibrations and concussions. High-resilient elastic bearings are also required for structures in which high loads meet very small areas, such as for crane installations, steel structures and heavy machinery. However, high loads typically also require large bearing surfaces over which the weight can be evenly distributed. In many cases, such large surfaces are not available due to design constraints.

**The high-resilient bearings from Getzner offer high performance, particularly with small support surfaces.**

**A** small bearing point is sufficient to efficiently support very high loads on the material. This allows an elastic bearing to provide optimal performance even under limited space conditions. Point as well as strip bearings are possible. This flexibility eliminates the need for expensive structural alterations, simplifying realization of the building and positively impacting the total costs. Even during a renovation or subsequent work, optimal results can be achieved with the installation of high-resilient bearings. The easy handling of these bearings is particularly evident on the construction site. They are relatively light, can be positioned without effort and even readjusted later. The high-load bearings from Getzner can be

### Product advantages

- High load decoupling with bearings in minimal space
- No expensive structural alterations required
- Simple handling and processing
- Minimized total costs

altered on the construction site without difficulty and also impress with maximum efficiency and quality as well as uncomplicated handling.

**T**he high dynamic efficiency of the material guarantees outstanding vibration insulation. These elastic bearings also have low heights and are easy to work with.



A high-resilient bearing from Getzner Werkstoffe can support a comparable load of roughly 600 tons on an area of one square meter.

# Complete vibration insulation from a single source

## Comprehensive service, engineering know-how

Combining Getzner standard materials with high-resilient bearings produces an optimal project-specific solution, depending on the structural requirements. Customers profit from the comprehensive Getzner service and the proven quality of the materials. Many reference installations confirm that the solutions for shock-proofing and vibration insulation stand the test in practice.

## Individually tailored services

Getzner works closely with customers to solve vibration-related problems, always focusing on the specific project requirements. The preliminary calculation of the deflection, natural frequency and degree of isolation form the basis for the material selection consulting. These components are critical for the success of the project. Getzner manufactures the materials to specification, if required, to ensure that they can be installed quickly and easily. If desired, the company will also take over local construction site management, organization of the installation work and creation of individual installation plans.



### Product properties

- High dynamic efficiency
- High load capacity: Up to 6 N/mm<sup>2</sup>
- Long service life
- Best long-term creep resistance
- Low amplitude dependence
- Low frequency dependence
- Relatively low weight
- Low flammability
- Resistant to chemicals and oils
- High mechanical strength (tensile strength, elongation at break)
- Specially selected stiffness values for various load requirements
- Usable as point or strip bearing



## Successful projects speak for themselves

Over 40 years of experience with vibration insulation resulted in the development of the Getzner high-resilient bearings. Getzner Werkstoffe offers builders, architects and other construction professionals a mature product that is ready to handle the challenges of real-world constructions.

Getzner develops elastic solutions for vibration insulation for railway, construction and industrial applications. The PUR materials are the result of in-house research and development. The company's competence is founded on years of experience and expertise. Many complex and successfully implemented projects have made Getzner a leading provider of vibration reduction solutions in the construction industry.

### Information required to use the high-load bearings

- Drawings  
(horizontal projection, cross-sections, details, etc.)
- Dead load, live load  
(people)
- Bearing position
- Bearing dimensions  
(length, width, height)
- Excitation frequency
- Target natural frequency
- Maximum deflection amount

### References

- Beisheim Centre Ritz-Carlton, Berlin
- Biogen Institute, Boston
- National Training Centre, Tokyo
- Lufthansa Headquarters, Frankfurt
- Kirloskar Oil Engines, Kagal
- EADS, Manching site
- Kahoku Shimpo, Sendai
- Teatro Nacional de Catalunya, Barcelona
- The National Opera, Oslo
- Drachen-Centre, Basel
- Skyline, Vienna
- The Rushmore Building, NYC
- Music Centre, Helsinki