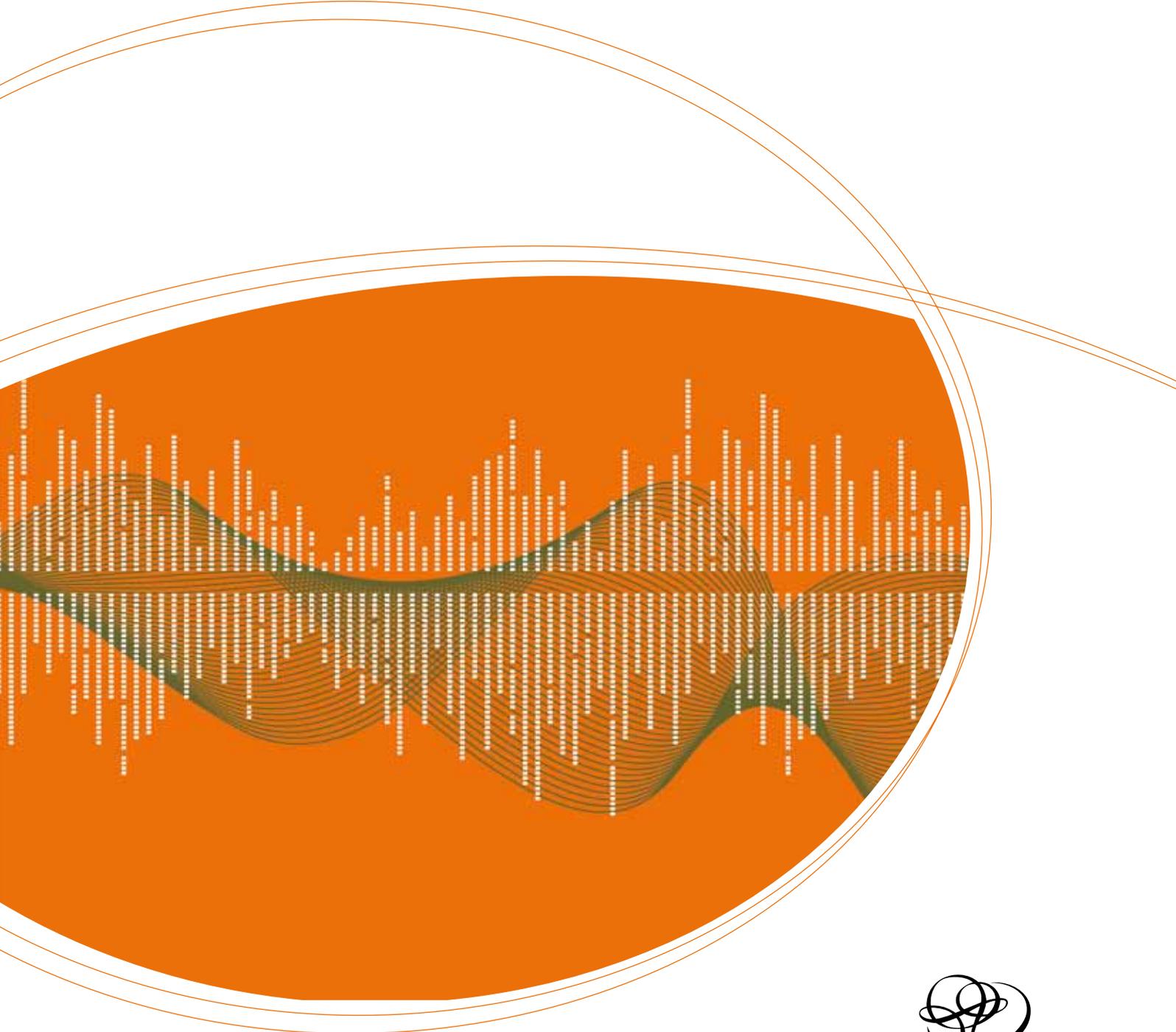


VIBRATION CONTROL

REINVENTING
THE SOUND
OF SILENCE



Reinventing how cork engages the world.



WAVE DAMPING TECHNOLOGY



REINVENTING SUSTAINABILITY FOR THE FUTURE

The Vibration Control solutions are made out of cork rubber materials. Our products are a high quality recycled rubber material made using recycled tyres, waste rubber and virgin rubber materials, saving energy, reducing oil consumption and keeping millions of pounds of tyre waste out of landfills.

Expertise in isolation and damping applications.

Amorim Cork Composites (ACC) is the world leader in the development and production of vibration control materials and products made with cork composites, as well as sound, thermal and electrical insulating materials and solutions.

ACC has been supplying and developing specific knowledge and experience in the application of isolation and damping characteristics. Our solutions are focused on offering custom and flexible solutions to a wide range of applications and markets, such as construction, railway and industrial OEM's.

Vibration isolation and damping is important to control unwanted vibration so that its adverse effects are kept within acceptable limits. Our vibration control product range is used in a vast number of products and components to ensure better function, comfort and durability.

As the world's leading manufacturer of cork-based composite materials for the dampening and isolation of vibrations, we offer comprehensive solutions for vibration control through consulting, engineering and the selection of the correct product in the appropriate composition, shape and size.

Technical support is part of our portfolio, as well as documented laboratory testing and material properties.



IN BALANCE WITH NATURE

Exclusive knowledge and know-how.

Cork composites for high performance

The Cork-based nature of our composites combines not only unique anti-vibration and damping features, but an economic and ecological value compared to other solutions.

Our specific polymer formulations and the inclusion of cork, due to its unique compressibility and recovery characteristics, absorb energy, yielding high material loss factors. Decades of intensive research and testing have shown the advantages of cork in vibration isolation and damping.

While cork has a higher loss factor than rubber, which is essential to the dampening function and consequent dissipation of energy, anti-vibration rubbers are isolative and offer very little damping. The combination of these two materials as a cork rubber composite brings added characteristics as a vibration control material.

No material combines performance and process handling with such perfection and variety, adding resistance to mechanical and thermal effects, as well as chemical compatibility, in products which are easy to cut and shape into the final application.

We are committed to delivering high performance, sustainable and cost-effective solutions to minimise undesirable vibrations in rail lines, machines supports, foundations and buildings.

Amorim Cork Composites offers customised products in the following fields:

- Railway Infrastructure;
- Construction Industry;
- OEM Equipment;
- Transformers and Reactors.



PREVENT VIBRATIONS IN BUILDING STRUCTURES

Construction

Most types of screed and concrete infrastructures transmit vibration, typically defined as structure-borne vibrations and eventually resulting in a noise nuisance (airborne noise) transmitted throughout the building structure. If left untreated, these vibrations and the consequent noise impact may become a health or even safety concern for people on site or in the adjacent buildings.

Some Applications

- **Screeds** to reduce Direct & Flanking structural vibrations.
- **Decoupling** in masonry and partition walls preventing flanking paths.





INDUSTRY AND MANUFACTURING - NOISE AND VIBRATION CONTROL

Industry

Industrial manufacturing machinery, infrastructures and building services equipment generate high levels of vibration, which promote structural vibrations and, ultimately, noise.

The control of unwanted vibrations, and consequently noise, not only contributes to environmental protection, but also to the performance and durability of the equipment, structures and surroundings, lowering wear and tear effects on equipment.

Our wide range of products and solutions can be customised to meet the requirements of each specific application.

Some Applications

- **Equipment Foundation Isolation** to reduce structure-borne vibrations to surroundings.
- **Decoupling** in metal to metal contacts, thus preventing flanking paths.
- **Vibration Control** for OEM equipment; impact machinery, shaker screens and motors etc.
- **Damping Structural Vibrations** to reduce airborne, transformers and reactors noise.



PREVENTS NOISE AND VIBRATION
IN RAILWAY SYSTEMS

Railway

Over the last years, the railway sector has undergone considerable worldwide growth, resulting in a significant increase in the frequency of urban and suburban trains.

This high flow of traffic generates high levels of vibration that need to be prevented and treated. Using our years of experience, we are a leading company in the engineering and production of materials and products to reduce vibrations in the light rail, underground, heavy and high speed rail infrastructure sector.

Some Applications

- **Rail Pads:** The main function of rail pads is to transfer the rail load to the sleeper while filtering out high frequency force components.
- **Baseplate:** The main function of rail baseplate pads is the elastic support of the rail on rigid surfaces such as concrete slabs, or steel bridges.
- **Under Sleeper Pads:** are elastic elements located between the sleeper and the ballast and are a cost-effective way of increasing the elasticity of the superstructure and reducing wear and tear on the ballast.
- **Ballast Mats:** The main function is to reduce the level of noise and vibrations on ballasted tracks.



Industry



Construction



Railway

DELIVERING VALUE THROUGH INNOVATION

The data provided in this brochure represents typical values. This information is not intended to be used as a purchasing specification and does not imply suitability for use in a specific application. Failure to select the proper product may result in either product damage or personal injury. Please contact Amorim Cork Composites regarding specific application recommendations. Amorim Cork Composites expressly disclaims all warranties, including any implied warranties or merchantability or of fitness for a particular purpose. Amorim Cork Composites is not liable for any indirect, special, incidental, consequential, or punitive damages as a result of using the information listed in this brochure, any of its material specification sheets, its products or any future use or re-use of them by any person or entity.



AMORIM CORK COMPOSITES

Rua de Meladas, 260
4535-186 Mozelos VFR · Portugal

T. +351 22 747 5300
F. +351 22 747 5301
E. acc@amorim.com

www.amorimcorkcomposites.com

USA

26112 110th Street
Trevor, Wisconsin 53179

T. + 1-262-862-2311
F. + 1-262-862-2500