KRAIBURG RELASTEC

SOLUTIONS FOR PROTECTION, SOUND AND VIBRATION ISOLATION IN RAIL TRAFFIC

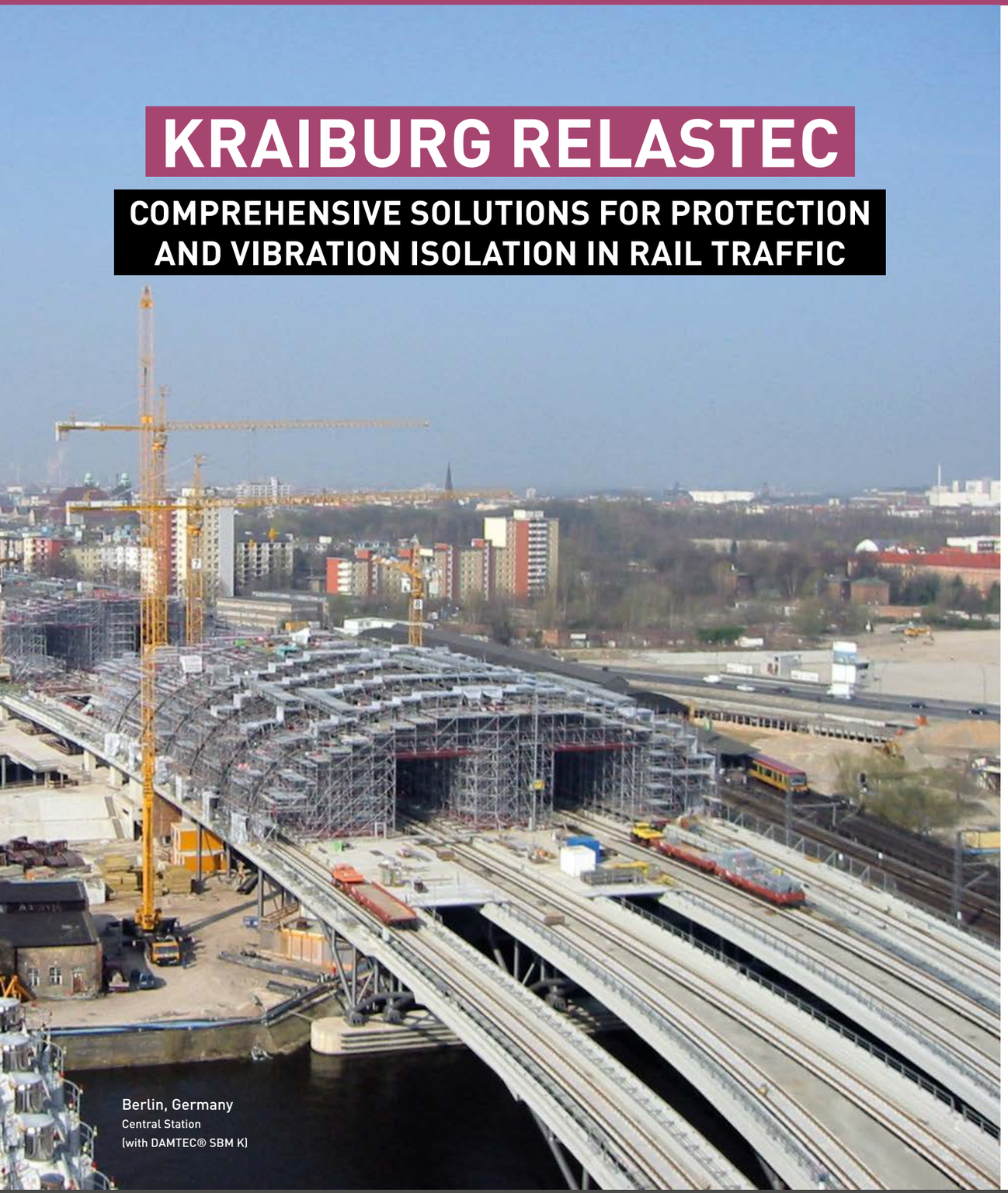
Providing peace and quiet along the track

DAMTEC®

EN #2 | 2026

KRAIBURG RELASTEC

COMPREHENSIVE SOLUTIONS FOR PROTECTION AND VIBRATION ISOLATION IN RAIL TRAFFIC



Berlin, Germany
Central Station
(with DAMTEC® SBM K)

KRAIBURG Relastec, as part of the KRAIBURG Holding, specialises in sub ballast mats and bearings for mass-spring systems with its DAMTEC® division. KRAIBURG Relastec has already established itself through numerous international projects with its DAMTEC® products and offers its partners an extensive range of solutions to protect and reduce noise and vibrations in rail traffic.

DAMTEC® products have been tested in recognized external testing institutes and internally for the sometimes very demanding, project-specific conditions and specifications. It goes without saying that KRAIBURG Relastec is ISO 9001, 50001 and 14001 certified and thus guarantees consistently high quality and complete traceability of its products.

DAMTEC® products are tested according to DIN 45673-5, DIN 45673-7, EN 17282, EN 17682 and other national standards.

Quality products - produced in harmony with nature

Environmental protection is a key strategic task at KRAIBURG Relastec. We are fully aware that sustainable growth is only possible if we live up to our commitments and responsibility for environmental protection. That`s why KRAIBURG Relastec has a constant course here: environmental protection is our daily program!

Manufacturer-related product qualification (HPQ), Q1 quality capability classification at Deutsche Bahn AG and German Federal Railway Authority (EBA) approval

KRAIBURG Relastec has been awarded the „Manufacturer-related Product Qualification (HPQ) by the quality assurance department of Deutsche Bahn AG and the „Supplier`s Quality Capability" is classified as Q1 for the product range of sub ballast mats by quality assurance of Deutsche Bahn AG (DB AG).

The HPQ qualifies a manufacturer to produce a particular product using specific processes already described in standards, drawings or other technical documentation. A renewal through audit must be carried out every three years.

Q1 is the classification of a company, which is audited within the scope of DB AG's supplier management with regard to quality capability. As a Q1-supplier of DB AG, one is authorised by the client DB AG to supervise prefabrication services on one's own responsibility. Project-related external production approvals are no longer mandatory.

Our sub ballast mats comply with the technical delivery conditions and are approved for use in the DB InfraGo AG network (according to DBS 889.0071 and e. g. TM-2015-10511 LNPF 1 with 01-02-02-23-PF-101).

Furthermore, the products DAMTEC® SBM K 10V, DAMTEC® SBM K 15V and DAMTEC® SBM K 20V meet the strict criteria for approval by the Federal Railway Authority.

DAMTEC® products consist of special rubber granules, such as foamed rubber and polyurethane foam from the recycling of post-industrial materials, i. e. from unused new raw materials. This leads to the desired properties and takes environmental protection into account. An aging of the rubber granulate is thus excluded. In particular, used tyres are not used here. With the extensively tested formulations, the products meet special requirements resulting from the loads in the track area. These elastomer materials are also used in other demanding areas such as building construction, civil engineering and tunnelling. Particularly noteworthy is the long-term behaviour, which guarantees a constant high level of effectiveness over decades. In this way, they efficiently counteract the multi-frequency vibrations and shocks that are transmitted to the environment.

DAMTEC® SBM

SUB BALLAST MATS

Schwieberdingen, Germany
(with DAMTEC® SBM K 10 V)

DAMTEC® SBM products are decoupling and protective mats under rail systems tested according to DIN 45673-5 and EN17282. They reduce structure-borne noise and secondary airborne sound as well as vibration emissions. In the case of ballasted track, the service life is extended by a lower and more uniform load. At the same time, they also protect engineering structures and seals.

DAMTEC® SBM K 10 roll

DAMTEC® SBM K 10 V / with or without drainage holes

DAMTEC® SBM K 10 - detail

Products:

DAMTEC® SBM K 10 • K 10 V*
DAMTEC® SBM K 20 • K 20 V*

Products with wave cut profile:

DAMTEC® SBM K 25/7 • K 25/7 V*
Other thicknesses available on request

* prefabricated geotextile-laminated variant (call us for details)

EPDs are available for DAMTEC® SBM products. You can download them from **kraiburg-relastec.com/en/epd**.

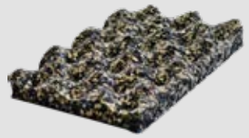
DAMTEC® MSS

FULL SURFACE BEARINGS FOR MASS-SPRING SYSTEMS

Kuala Lumpur, Malaysia
(with DAMTEC® SBM K 25/7)

DAMTEC® MSS products are decoupling and protective mats under rail systems tested according to DIN 45673-7 and EN17682. They reduce structure-borne and secondary airborne noise and vibration emissions when used in „floating slab track“ (mass-spring system). DAMTEC® MSS products are supplied in rolls. Contact us to find the right dimensions that fit your needs.

DAMTEC® MSS K 25/7 roll



Detail wave cut profile
Bottom of DAMTEC® MSS K 25/7

Products:
DAMTEC® MSS K 20

Products with wave cut profile:
DAMTEC® MSS K 15/7
DAMTEC® MSS K 20/10
DAMTEC® MSS K 25/7

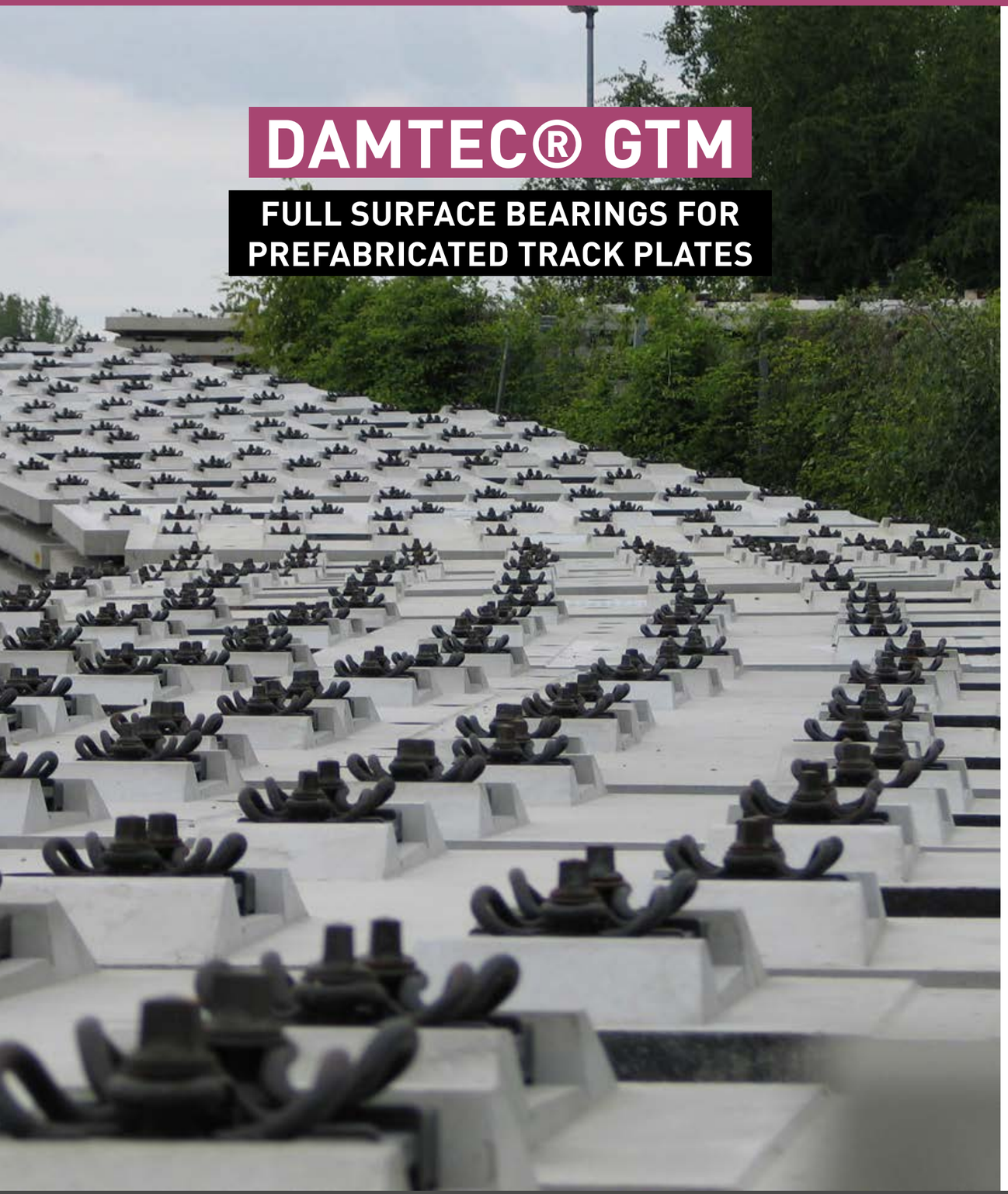
Also available with geotextile or PE membrane-laminated version on request.

Various raw material options

DAMTEC® MSS K
- Noble, post-industrial material (polyurethane foam & foamed rubber)
- Very good Insertion loss performance
- New, unused, virgin material without any aging, good performance
- Approved, accepted material by railway authorities
- Product Carbon Footprint Cradle to Gate: 0.69 kg CO_2e per m²mm

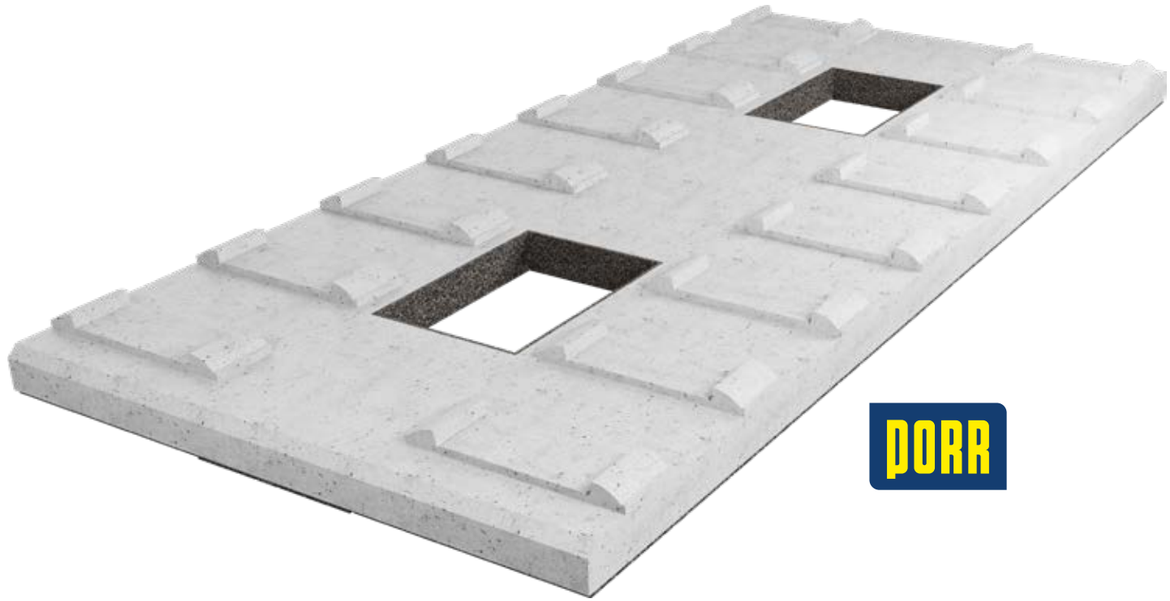
DAMTEC® MSS BR
- End of Life material
- Product Carbon Footprint Cradle to Gate: 0.46 kg CO_2e per m²mm
- Cheaper

DAMTEC® MSS RF
- End of Life material
- Very good Insertion loss performance
- Product Carbon Footprint Cradle to Gate: 0.53 kg CO2e per m²mm



DAMTEC® GTM

FULL SURFACE BEARINGS FOR PREFABRICATED TRACK PLATES



DAMTEC® GTM products are elastic separating layers for decoupling of track slabs. They are attached to both the plate sole and the conical grouting holes. This minimizes vibrations emitted into the ground.

In combination with DAMTEC® GTM, the slab becomes a lightweight mass-spring system with excellent structure-borne sound insulation.

DAMTEC® GTM roll

Detail

COMPREHENSIVE SERVICES

WE SUPPORT YOU WITH THE ENTIRE RAILWAY PROJECT

Solution Development & Detailed Solutions

Our many years of experience and our know-how with products for acoustic and vibration reduction are a guarantee for the solution of even very complex problems. Together with you, our specialists will develop effective systems to eliminate or minimize disruptive factors in the problem areas. In addition to standard solutions based on experience, we are of course also technically and personally in the position to implement completely new solutions, exactly adapted to your requirements.

Calculations, simulations and efficacy forecasts

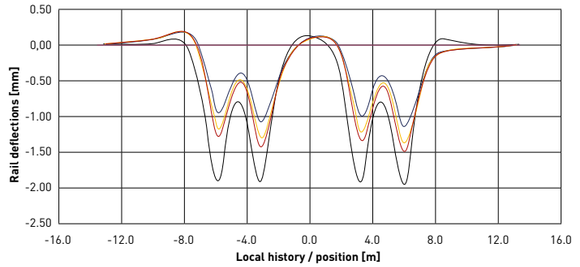
To find out how effective measures can be in dealing with an emission problem, you don't have to wait until they are implemented. After a first inspection and analysis of the conditions on site, our specialists are able to create a calculation model in which all relevant factors regarding vibration and damping behaviour with different material properties are taken into account. This results in a realistic simulation that allows fine-tuning of these factors and enables our specialists to develop the optimum solution.

At the end of the planning phase, you will receive proof of the expected effectiveness of the system. This efficacy forecast gives you the assurance in advance that your expectations will be met successfully.

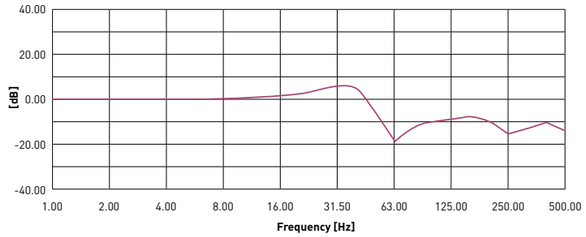
Our services at a glance

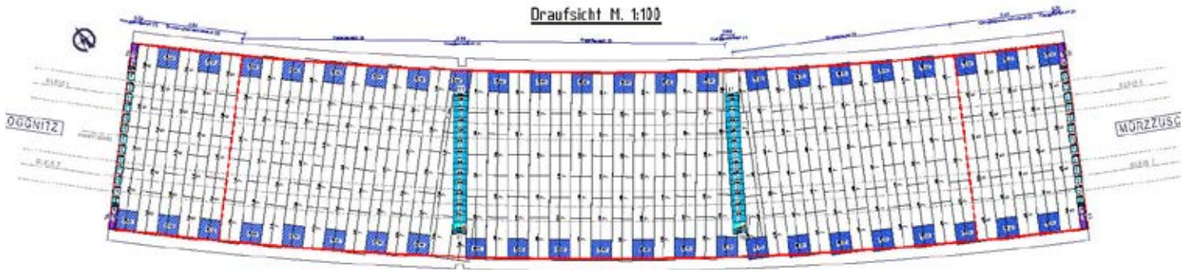
- material testing and measurement on our own large scale test bench
- project support from the beginning
- installation advice and site support
- preparation of installation plans
- vibration-technical, mechanical measurements
- solution development
- calculation and simulation
- prediction models

Example „rail deflection"



Example „insertion loss"





THE ADVANTAGES OF OUR PRODUCTS

- sustainable raw materials
- extend the life of the ballast
- protect the sensitive waterproofing layer against damage by the ballast
- reduce the transmission of structure-borne sound
- keep track position stable for longer period of time
- low water absorption
- protect adjacent structures by reducing vibrations
- reduce secondary airborne sound
- extremely durable
- reduce track maintenance costs
- easy installation

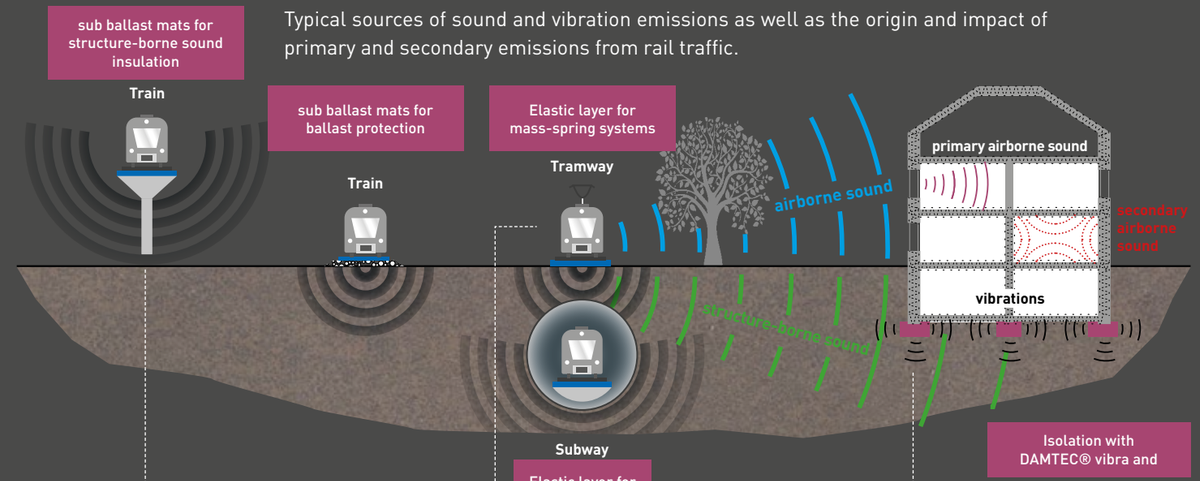
SOUND EMISSION AND IMMISSION

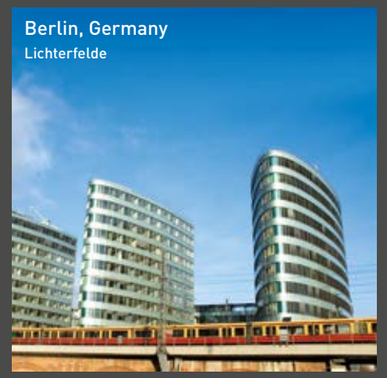
SOURCES DUE TO RAILWAY TRAFFIC

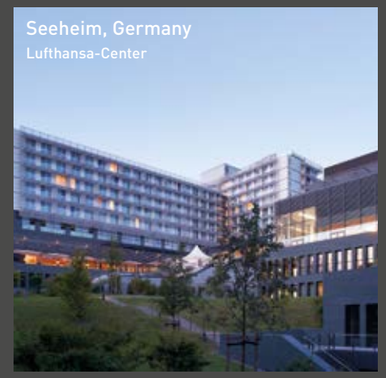
Railway vehicles generate rolling noises and vibrations during operation. This is due to roughness and imbalances on both the wheels and the rail running surfaces. Surface defects such as head checks, corrugations and slip waves on the rails are known to be among the most common sources of interference.

These vibrations are transmitted to the ground via the roadway and spread as structure-borne noise. If buildings are located along or near the track, a transfer is also carried out via their foundations. The buildings begin to vibrate and, with the appropriate intensity, they are also preceived by humans as perceptible vibration or disturbing noise. Another consequence of this transmission chain is the emission of vibrations from building parts, e. g. ceilings and walls, to the environment. This takes place via the air, which begins to vibrate itself and then become audible as socalled secondary airborne sound.

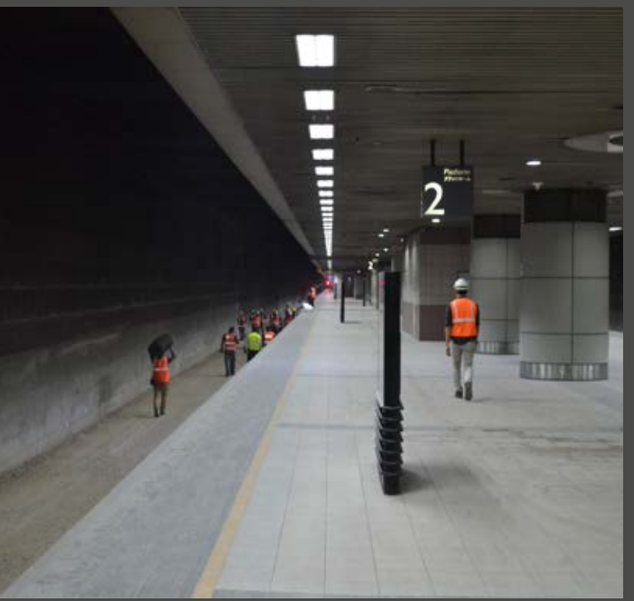
Typical sources of sound and vibration emissions as well as the origin and impact of primary and secondary emissions from rail traffic.

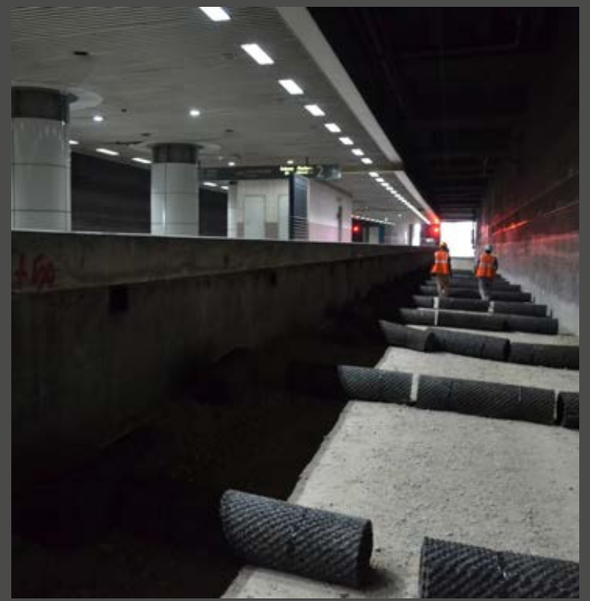






Kuala Lumpur, Malaysia, 2018
DAMTEC® SBM K 25/7



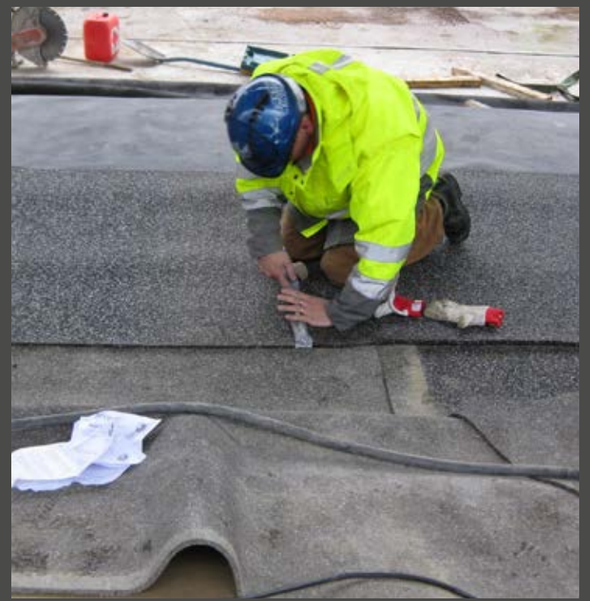


Wiener Linien, Austria, 2005
DAMTEC® SBM K 23

Freilassing, Germany, 2017
DAMTEC® SBM K 10 V

Bremgarten, Switzerland, 2018
DAMTEC® SBM K 20

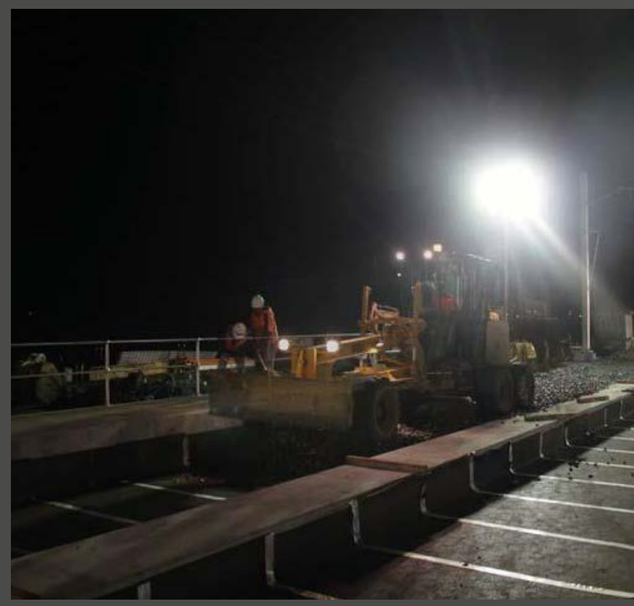
Kuvola Station, Finland, 2010
Full surface DAMTEC® SBM K 10



Cologne-Kalk, Germany
DAMTEC® SBM K 10

Schwieberdingen, Germany, 2016
DAMTEC® SBM K 10 V

Officer Road, Officer, Australia, 2013
DAMTEC® SBM K 10



KRAIBURG PuraSys

Products for the railway industry made of polyetherurethane

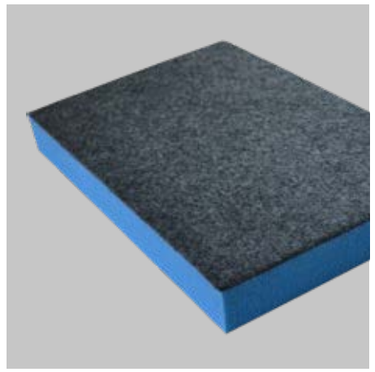
Polyurethane is a fascinatingly versatile material. KRAIBURG PuraSys GmbH & Co. KG with its 110 employees is an efficient partner for a wide range of industries and branches of industry. It cooperates with the automotive industry, the rehabilitation, health and leisure sector, furniture manufacturing, power tool and mechanical engineering, the construction industry and rail transport companies. The railway sector has made a name for itself with its high-quality products in numerous projects worldwide.

The products of our sister company, KRAIBURG PuraSys GmbH & Co. KG, consist of mixed-cell or closed-cell PU foam. These are cellular polyurethane elastomers with outstanding properties. Basic types with different properties are available for almost every application. Adaptation to individual applications is simple and is done by selecting the type.

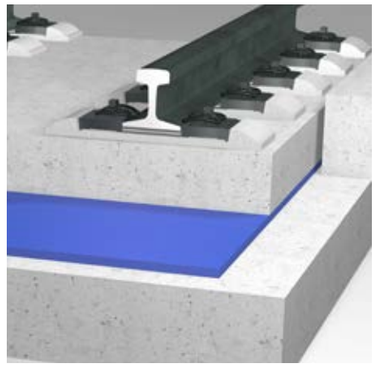
PURASYS products are tested in recognized external testing institutes and internally for the sometimes very demanding conditions and specifications. KRAIBURG PuraSys is certified in accordance with ISO 9001, thus guaranteeing consistently high quality and complete traceability of its products.

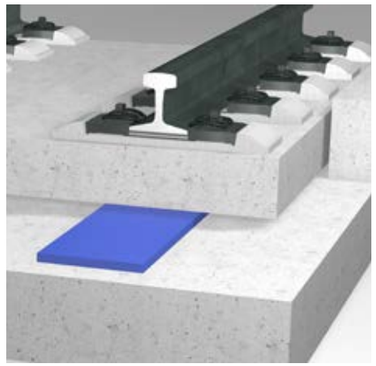
PRODUCT OVERVIEW

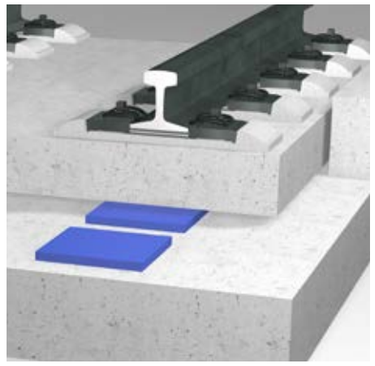
PURASYS SBM
Under ballast mats



PURASYS MSS
Full surface bearings, strip-like support and point bearings for mass-spring systems

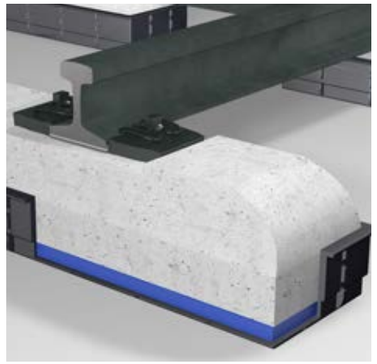




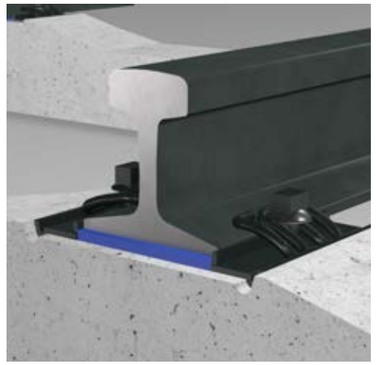


PURASYS BPP
Base plate pads

PURASYS ESB
Elastic sleeper boots



PURASYS ERP
Elastic rail pads



Beijing Metro Linie 6 , China, 2017
PURASYS SBM P 2025, SBM P 2032, MSS P 2025

Kartner Kogel, Austria, 2017
PURASYS MSS P 4025, P 3625 and PN 3225

Esfahan Metro Line, Iran, 2015
PURASYS MSS P 2023

KRAIBURG PURASYS

ACOUSTIC & VIBRATION ISOLATION
made of polyurethane

Products for reducing noise and
vibration emissions in the rail sector

KRAIBURG PuraSys GmbH & Co.KG
Porschestraße 1 · D-49356 Diepholz

Tel. +49 (0) 5441 5954 -0
Fax +49 (0) 5441 5954 -24

info@kraiburg-relastec.com

www.purasys.com

SUSTAINABILITY

Corporate Carbon Footprint, Product Carbon Footprint, Energy Management, Social and economic sustainability at KRAIBURG Relastec

Recycling of up to 60,000 t material

Every year, we process and recycle up to 60,000 tons of old tyres, closed-cell rubber and rubber production scrap.

Reduction of CO_2 emissions

By using recycled rubber granulate, we save more than 130,000 tonnes of CO_2 emissions per year compared to virgin rubber.

Corporate & Product Carbon Footprint

The CCF was developed in accordance with the Greenhouse Gas Protocol. The PCF is calculated in accordance with ISO 14067 and ISO 14040/44 audited.

Environmental Product Declarations (EPDs)

Environmental Product Declarations (EPDs) are available for many products. You can download them from the relevant product pages or via kraiburg-relastec.com/en/epd

Energy management according to ISO 50001

Our energy management system is identified according to ISO 50001. Energy-relevant topics are taken into account in all processes of the organisation.

Certified environmental management system

Our environmental management system is certified in accordance with DIN EN ISO 14001:2015. This guarantees that an effective environmental management system is integrated and continuously improved.

Member of NEW LIFE initiative

The declared aim of NEW LIFE is to demonstrate the advantages of recycled products from End-of-Life Tires (ELT) to the media, politicians and the general public and to motivate them to act sustainably. More information: www.initiative-new-life.de/en

Recycling of end-of-life products

For us, sustainability means taking responsibility for the entire product life cycle. That is why we offer an in-house recycling service for end-of-life rubber granulate products. Find out more here: kraiburg-relastec.com/en/circular

Voluntary rating

The ecovadis rating is an evaluation of companies with regard to CSR topics. This includes ethical aspects, sustainable procurement, the environment and ecological sustainability.

CORPORATE CULTURE

Defined values, social norms and guidelines, for common action and cooperation inside and outside KRAIBURG Relastec.

Equal opportunities

We stand for equal opportunity, diversity, inclusion and religious diversity.

Social responsibility

Fair pay, collective bargaining, further training, career development, work-life integration.

Respect

We are honest, reliable, respectful and trustworthy towards our colleagues and partners.

Strong decision-making powers

We ensure speed in process handling, faster technology optimisationsand lean processes.

Responsible for our actions

We take responsibility for all decisions and results. Error acceptance and the strong will to correct and learn from them are firmly anchored in our culture.

Transparency

We practice open, transparent cooperation both inside and outside the company.

WHAT SETS US APART

Personal contact persons

We do not hide behind support hotlines and contact forms. With us, you have personal, competent contact persons.

Product quality

Our products meet the highest quality standards. They are durable, a perfect fit and made from high-quality raw materials.

Innovation and product design

We continuously develop new products according to the requirements of our customers and the market.

Internationality

With an export quota of over 50%, we have already exported our products to over 100 countries.

Easy complaint management

Transparent and optimised processes ensure rapid processing.

Flexibility with customer requirements

We offer our partners customised options for packaging, labelling and delivery, packaging, labelling and delivery.

Long-term relationships

We maintain long-term relationships with our customers and suppliers based on mutual respect and fairness.

Marketing support

We provide you with the best possible support in the form of images or in the design of your documents.

DAMTEC®

Acoustics and Vibration Isolation
made from rubber granules

KRAIBURG Relastec GmbH & Co.KG
Fuchsberger Straße 4 · D-29410 Salzwedel

Sales International:
Tel. +49 (0) 8683 701 -124
damtec@kraiburg-relastec.com
www.kraiburg-relastec.com/damtec

All information without guarantee. Subject to change without notice.
© KRAIBURG Relastec GmbH & Co. KG 2026

Made in Germany

quality austria
SYSTEMZERTIFIZIERT
ISO 9001:2015 NR. 00186/0
ISO 14001:2015 NR. 05343/0
ISO 50001:2018 NR. 00070/0

CERTIFIED IQNet MANAGEMENT SYSTEM

U.S. GREEN BUILDING COUNCIL MEMBER

NEW LIFE
INITIATIVE-NEW-LIFE.DE