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# ELTECPUR® rail

Elastic mouldings from environmentally friendly rubber granules

Rail filler blocks,
Level crossings, Elastic Mats

HET
ELASTOMERTECHNIK

# RAW MATERIALS FOR URBAN TRANSPORT
## In First Hand Quality

Our ELTECPUR® rail filler block systems are made of a mixture of recycled rubber granules, cable rubber and rubber powders from European production. High-grade polyurethane is used as binder.

The individual mixtures have been developed in accordance with precise manufacturing formulae which are monitored, tested and documented in the same way as in the production processes for various kinds of concrete or asphalt. When recycled materials are used, they must be subjected to particularly stringent testing to ensure their homogeneity and quality. All materials used are free of polyvinyl chloride (PVC).

All work processes, developments and documentations comply with the requirements of DIN EN ISO 9001 ff. or 14001. In particular, evidence of the properties stated and assured for the various products is provided by test certificates from independent experts or institutes. Apart from this, our products have proved their quality and properties throughout Europe for over 30 years.

Leading position in track construction through experience and diversity

# Welcome to HET Elastomertechnik GmbH

For 30 years we have been producing and selling elastic products made of recycled material.

Our principal fields of application are solutions for rail transport, mouldings for industrial and construction sites, playgrounds and leisure activities, and safety technology.

With our ELTECPUR® rail insulation systems we hold a leading position in the area of track construction and thus make an important contribution to environmental protection and resource conservation. We are constantly developing new systems and products designed to make leisure and everyday activities easier and safer, with the result that our customers benefit greatly from our experience and diversity.

The mission and goal of our international team is to develop economic and innovative solutions for our customers.

Dipl.-Ing. (ETH) Jean-Pierre Frottier
Director

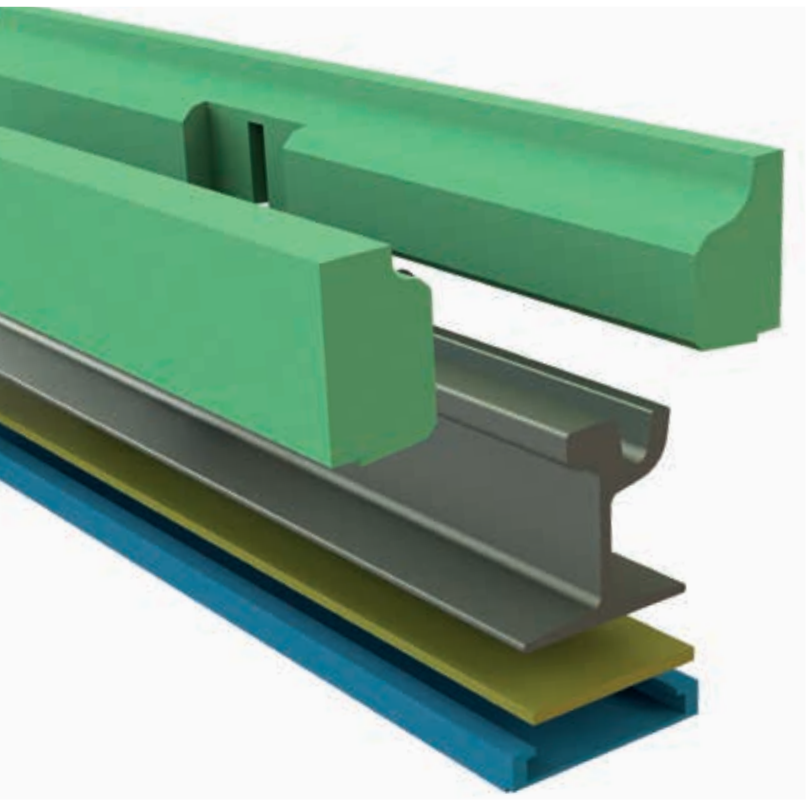
ELTECPUR® is a registered trademark of HET Elastomertechnik GmbH.

Reduction of air-borne and structure-borne sound

# ELTECPUR® rail filler blocks

## ENVIRONMENTAL AWARENESS

Now that society has become more keenly aware of environmental issues and in view of the advantages for urban mobility, greater importance is being attached to rail-bound transport with modern vehicles and innovative traffic control systems. Optimised harmonisation between rolling stock and superstructure, as well as measures to reduce shocks and vibrations emitted by the superstructure (air-borne and solid-borne sound), make a substantial contribution to environmental protection. The effectiveness of vibration-damping track bedding systems is significantly influenced by the conditions prevailing at the particular site (including geological and constructional factors), and the processing of the blocks. Processing errors can reduce effectiveness considerably.



## SOLUTIONS

For this reason, our aim is to provide an economic solution by which tram rails can be insulated acoustically and electrically while not only meeting the specifications of the individual project but also fulfilling the international standards. Since our systems can be supplied for any type of rail or superstructure, the numerous public transport companies which have adopted them are aware that the system they have chosen enables them to benefit from the advantages of many years' experience and to remain at the forefront of technological development. New and further developments are integrated into the system, always with a view to the requirements of our customers, who are able to choose the variant or module best suited to their needs.

The ELTECPUR® rail filler blocks have been developed specifically to reduce solid-borne and air-borne sound and to provide electrical insulation against stray currents. The successful achievement of this wide range of effects has been clearly demonstrated.

## DISTINCTIVE FEATURES OF THE ELTECPUR® rail SYSTEMS:

### VIBRATION DAMPING

With their high density, ELTECPUR® rail filler block systems possess excellent acoustic damping properties.

### ELECTRICAL INSULATION / WATERTIGHTNESS

Due to their low water absorption even under load, the ELTECPUR® rail filler blocks ensure good insulation against stray currents.

### STABILITY

Build-up welding can be carried out without any problems, since the blocks possess high temperature resistance.

### COMPATIBILITY WITH HOT POURING OF RAIL JOINT SEALANT

### EASE OF HANDLING / ACCURACY OF FIT

Thanks to their high accuracy of fit and their low shrinkage, the blocks can also be installed without the aid of adhesives.

### GEOMETRICAL ADAPTABILITY

Complex shapes can be manufactured without any difficulty during the production process (e.g. recesses for weld joints).

### FAVOURABLE LIFE CYCLE ASSESSMENT

We use recycled materials in the production process, and our products are 100 % recyclable. In this way we make a major contribution to environmental care.

## CUSTOMISING – THAT'S OUR WATCHWORD!

Depending on the project and the actual situation, the standard blocks (inner and outer) can be produced in lengths from 650 mm to 1500 mm.

The individual blocks are tailored to order for the type of superstructure used and in consultation with the customer. We will be glad to carry out the measurements on site, if the customer so wishes. It is possible to produce exactly fitting blocks even for smaller radii.

The individual filler blocks are easy to install and, where need arises, are not dependent on the sleeper spacing.

The advantages of the ELTECPUR® rail Standard and Standard Plus Track Systems are definitely in their handling. They can be installed quickly and easily, while at the same time ensuring complete sealing of the rail foot with the aid of components. And, thanks to the clamping effect of the product, there is no need for assembly aids (such as adhesives). The systems can be used for all types of rail.

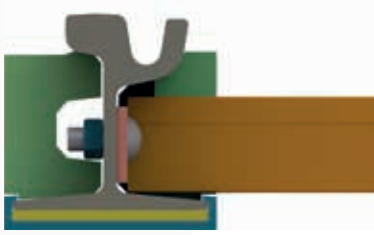
Quick and easy to install

# ELTECPUR® rail
## Standard and Standard Plus Track System

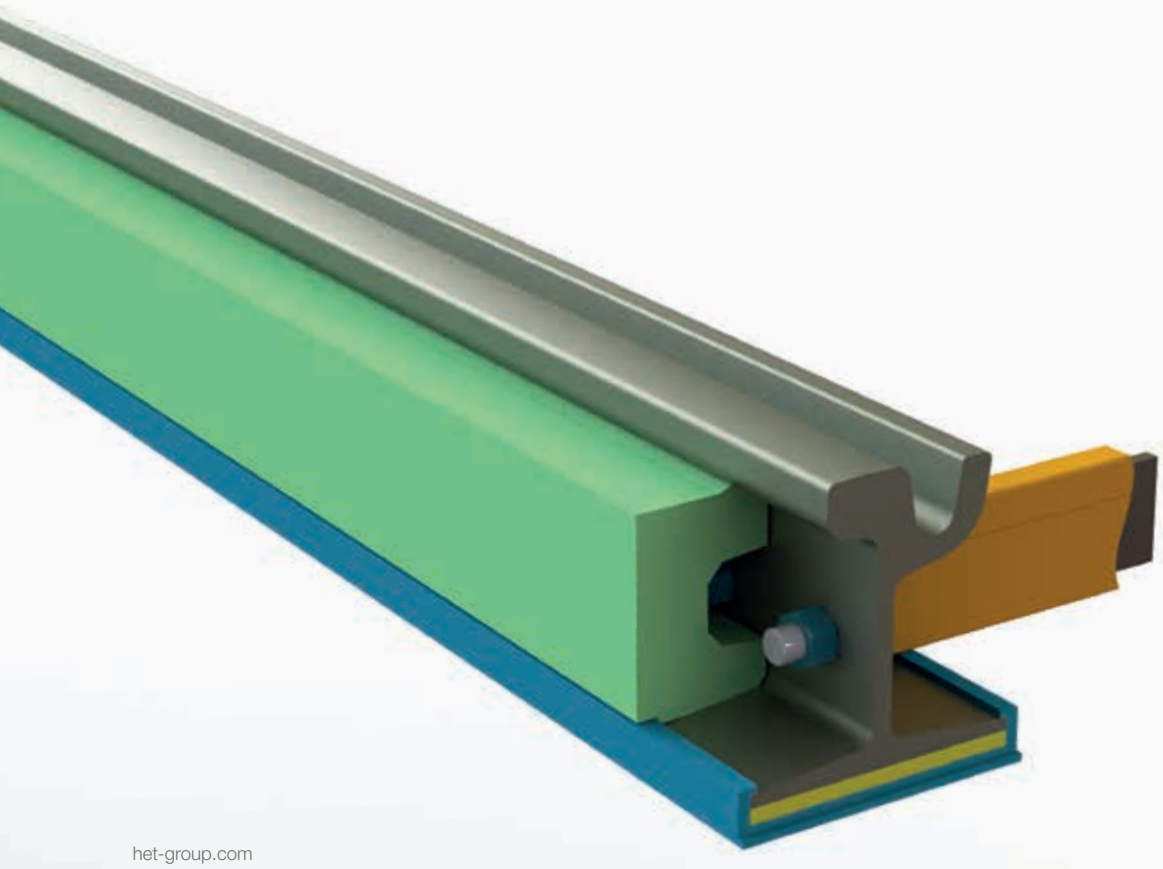
ELTECPUR® rail Standard and Eltecpur Standard Plus Track Systems from HET are easy to handle systems for rail support and insulation provided with an inner and an outer block and an elastic rail foot casing. Depending on the type of embedding (asphalt, concrete, grass, etc.) or the superstructure of the tramway, the rail foot casing can be produced with different spring characteristics for variously specified rail deflections or insulating properties.

ELTECPUR® rail Standard and Eltecpur Standard Plus Track Systems are also suitable for all other standard rail fastening systems (K, KS, W) and for sleeper tracks, cross-sleeper tracks, etc. Because of our diversity in production, they are used not only for road-embedded tracks but also in grass track sections.

Standard

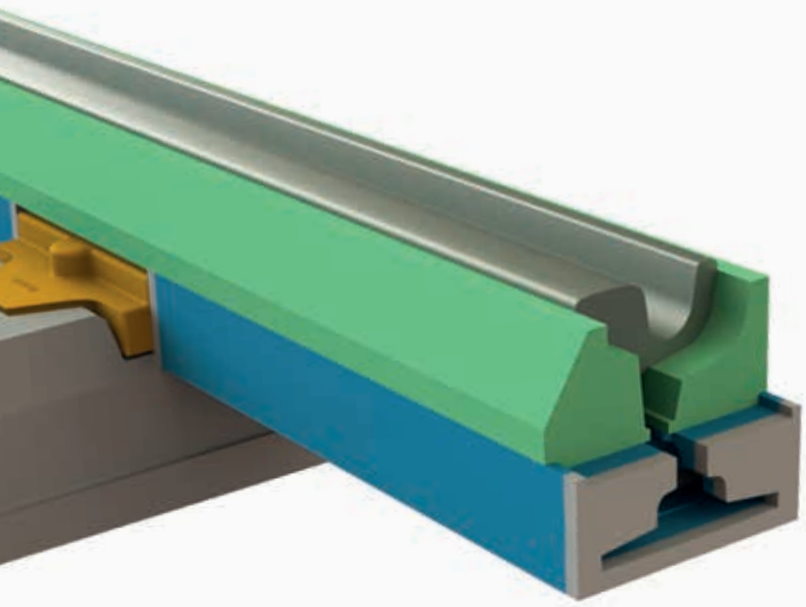


Standard Plus



# ELTECPUR® rail
## Multipart and Multipart Plus Track System

ELTECPUR® rail Multipart and Multipart Plus Track Systems were developed for sleeper or rib plate constructions. They were used first in Valenciennes and Mulhouse.



As an additional feature, the ELTECPUR® rail Multipart Plus Track System has foamed plastic compression plates on the front edge of the lower parts. They compensate tolerances in the positions of the sleepers, thus ensuring the insulation of the system.

ELTECPUR® rail Multipart and Multipart Plus Track Systems are protected by patents. The systems consist of two upper parts (inner and outer blocks) 1500 mm in length, and two symmetrical lower parts of varying lengths, depending on the sleeper spacing.

Multipart

Multipart Plus

# ELTECPUR® rail
## Seamless and Seamless Plus Track System

ELTECPUR® rail Seamless and Seamless Plus Track Systems can be used for all types of superstructure. Because of our diversity in production and the specific characteristics of the systems, they are used not only for road-embedded tracks but also increasingly in grass track sections.

The systems consist each of one inner and one outer filler block, which can be produced technically in lengths from 750 mm to 1500 mm, depending on the specified construction design.

The blocks are produced to exactly fit the rail profile used. An additional component is a clamping strip, which encloses and insulates the rail foot. Depending on requirements, the clamping strip can be produced in either an elastic or a rigid version. Viewed in cross-section, the ELTECPUR® rail Seamless Track blocks slope outwards at the lower end, thus forming “legs” at the sides. This special geometry, in combination with the clamping strip, prevents concrete from entering during the paving phase and allows concrete to be poured in 2 layers during the construction phase. It is also possible to provide a surface structure on the upper side with a certain anti-slipping effect.

Seamless

Seamless Plus

Cost-efficient
level crossings

*CrossTrack Lite*

# HET CROSSTRACK
## Level Crossings

Road-rail intersections are discontinuities which frequently present problems arising out of the combined use of the thoroughfare. HET Elastomertechnik GmbH has taken on this challenge and come up with solutions for its customers. The use of various elastomer profiles allows gaps of the necessary width and depth to provide level and, as far as possible, smooth traffic movements.

Our newest CrossTrack Level Crossing features numerous innovations in terms of easy handling and quick installation. Thanks to the patented modular design, the new CrossTrack Level Crossing can be removed and installed without any equipment. In addition, the CrossTrack Level Crossing is secured against lateral and vertical displacement by means of a new patented system and enables easy maintenance in conjunction with the modular sandwich construction.

*CrossTrack Pro*

# ELTECPUR® rail
## Elastic Mats – for floating-slab systems

For many years, HET Elastomertechnik GmbH has been producing high-quality elastic mats for a wide range of applications. They are used both as sub-ballast mats for railways and as elastic mats for light mass-spring systems in urban transport. To give our mats even greater softness, we have developed and patented the perforated mat. This is a cost-saving and effective way to damp low-frequency vibrations. This mat has proven its worth in practice with excellent vibration damping values.

QUALITY AND SERVICE – OUR KEY TO SUCCESS

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