# STRAI astic

quiet.





street meets rail.





the gentle track.





we think green.





### **KRAIBURG Company**

With approx. 2000 employees and a total turnover (2014) of €480 Million.

#### KRAIBURG STRAIL GmbH & Co. KG

### **Division STRAIL** – level crossing systems

- developed over 30 years ago
- approx. 40,000 installations in 50 countries

### **Division STRAILastic** – track damping and isolating systems

- reduces noise and vibration emitted from the track
- excellent stray current isolation
- was developed over 15 years ago
- over 30 years Know How





### Solutions for embedded tracks



### **Green track systems**





#### **Noise absorbers**



**Infill panels** 





### **MATERIAL**

- recycled rubber granules with binder of virgin renewable material
- water absorption under 0,5 % due to high density > immune to freeze/thaw cycles
- operational temperature stability over extreme range (-55° to +90° C)
- short term temperature stability (> 200° C), allows for welding & grinding
- protects against stray current corrosion and transmission of vibration
- long service life since indestructible and resistant to all chemicals commonly used in a traffic-related setting
- environmentally friendly as it is made of recycled rubber granulate and can be recycled after the removal

#### **PROCESS**

vulcanization using high pressure and temperature, delivers dimensional stability

#### INSTALLATION

glue free assembly => flexible profile, can accommodate tight radii, can be pre-fitted to rail



## STRAILastic vulcanized and UV-light/ozone resistant profiles

Berlin 2013 (STRAILastic installation 2001)



### vs. Polyurethane bonded profiles

Berlin 2013 (installation 2003)



### STRAILastic vulcanized and UV-light/ozone resistant profiles

Düsseldorf 2013 (STRAILastic installation 2012)



### vs. Polyurethane bonded profiles

Düsseldorf 2013 (installation 2012)





## STRAILastic vulcanized and UV-light/ozone resistant profiles



### vs. Polyurethane bonded profiles





track damping systems



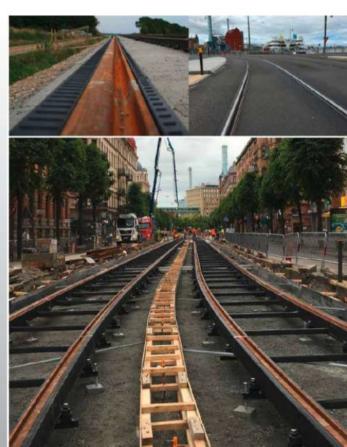






### STRAPASTIC > Top of Rail Solutions | BENEFITS

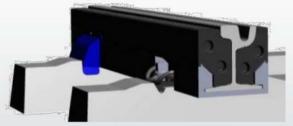
- Quality solutions made of hot vulcanized rubber
  - => External finish in virgin rubber
  - => Low degradation (UV, abrasion, etc.) of the profiles
- Reduced track installation time and cost
  - => Self clamping profiles even in curves
  - => Pre-assembly possible
- Life cycle cost optimization
  - => Low maintenance due to the absence of joint sealant
  - => Resistant to track maintenance operations (grinding, etc.)
  - => Easy disposal as fully recyclable
- Long life of the system
  - => Examples over 15 years



### STRAL astic SYSTEM TOR

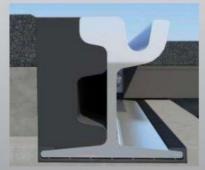
> For tracks based on sleepers or baseplates





# STRAL astic SYSTEM TOR SIMPLEX

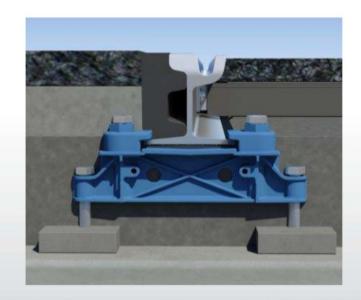
> Specified for tracks on continuous support



### STRAL astic\_GRS

"We help you to reduce construction periods"

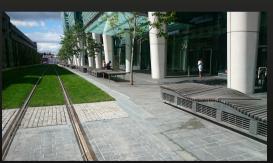
- completely pre-installed rail bedding system
- simple alignment
- cast in concrete without the use of an additional levelling course





green track systems







### STRAL astic > Green Track Systems | BENEFITS

- Quality solutions made of hot vulcanized rubber
  - => External finish in virgin rubber, UV and ozone resistance
  - => Tongue / Groove connection (option)
  - => Optimised stray current isolation
- Maintenance cost optimisation
  - => Easy access to rail and fastenings
  - => Smooth surface easy to clean
  - => Fully reusable and recyclable
- Versatile solutions
  - => Adaptable to track construction systems
  - => Can be driven over for emergency & service access
- Operational experience over 15 years









### STRAL astic\_R\_TYPE AUGSBURG



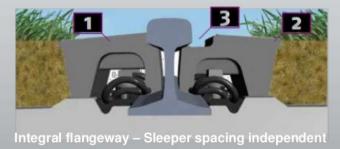
### STRAL astic\_R\_TYPE ZURICH



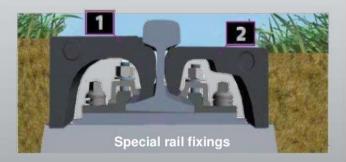
### STRAL astic\_R\_TYPE BERLIN



### STRALastic\_R\_TYPE BREMEN



### STRAI astic\_R\_TYPE BIELEFELD



# Projects and Other Products



### **STRAILastic TOR Simplex + GRS**

Poland, Gdansk – Installation 2014



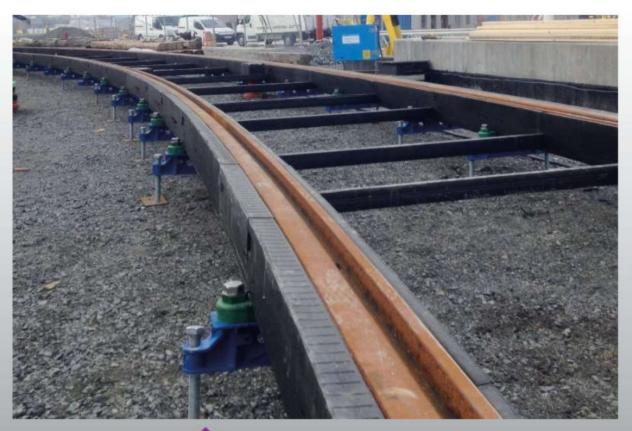


### STRAILastic TOR Simplex + GRS

Installation year	2014
Track length	2.128m
Country / city	Poland / Gdańsk
Customer	ZKM Gdańsk
Upperstructure	Asphalt
Traffic	Road traffic

### **STRAILastic TOR Simplex + GRS**

Sweden, Gothenburg – Installation 2014





#### STRAILastic TOR Simplex + GRS

Installation year	2014
Track length	735m
Country / city	Sweden / Gothenburg
Customer	Västtrafik
Upperstructure	Asphalt / Pavement
Traffic	Road traffic

### **STRAILastic TOR Simplex**

Austria, Vienna – Installation 2015





STRAILastic TOR Simplex		
Installation year	2013-2016	
Track length	5.710m	
Country / city	Austria / Vienna	
Customer	Wiener Linien	
Upperstructure	Concrete	
Traffic	Road traffic	

## STRAILastic TOR System Aarhus (W-tram) Denmark, Aarhus – Installation 2015









OTTALEastic Tott Oystoni Autilias	
Installation year	2015
Track length	16.120m
Country / city	Denmark / Aarhus
Customer	Aarhus Letbane
Upperstructure	Grass / Asphalt
Traffic	Green track & crossings

STRAIL astic TOR System Aarhus

### **STRAILastic TOR Simplex**

Germany, Freiburg – Installation 2016







STRAILastic TOR Simplex	
Installation year	2016
Track length	180m
Country / city	Germany / Freiburg
Customer	Freiburger Verkehrs AG
Upperstructure	Pavement
Traffic	Pedestrian area

www.strail.com / www.strailastic.com



STRAL astic







STRAIL® level crossing systems / STRAILastic track damping systems

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veloSTRAIL rap - Inspection Instructions replaceable flangeway element

Subject to technical changes / May 2014 / JBA



STRAIL® level crossing systems / STRAILastic track damping systems

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# Thank you for your attention



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### STRA astic

-/ track damping systems / Gleisdämmsysteme

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