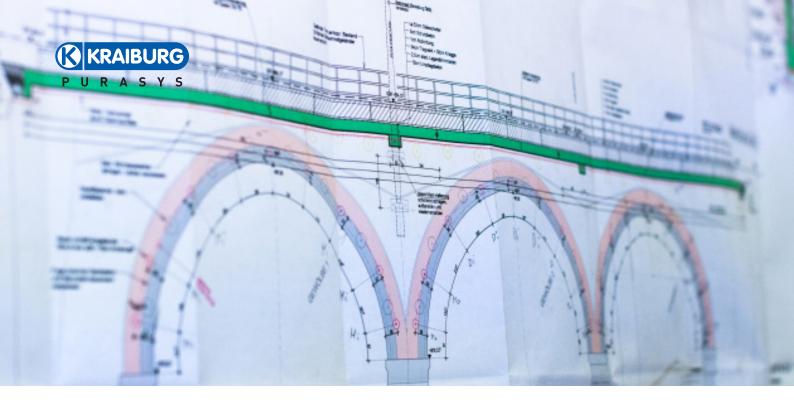




Viaduct Semmering, Kartnerkogel, Austria

Mass-spring system with

PURASYS MSS P/PN



1. Project

Track Vienna central station
– Graz Hbf (ÖBB)
Track number (ÖBB): 105 01
Bridge structure:
Kartnerkogel (Wolfsbergkogel)

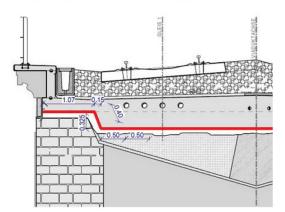
- Partial renovation of the 160-year-old protected as a historic railway
- The Semmering Railway was the first standard gauge mountain railway in Europe and has been a UN-ESCO World Heritage Site since 1998.
- Renewal of about ten kilometers of track and the associated switches. At the sim-ultaneously, the Kartnerkogel Viaduct is being renovated and brought up to the latest technical standard.
- Today, the Semmering Railway is still considered a milestone in the history of rail-ways. Around 180 trains travel over the challenging mountain range every day.
- In addition, the high traffic volume and seasonal temperature changes have affect-ed the historical track route, so that it must be extensively renovated.

2. Installation

The elastic components in the mass spring system PURASYS MSS P/PN was installed according to the instructions of PURASYS GmbH & Co. KG. In addition, we recommend spot gluing the mat to the ground due to regionally strong winds.

As with any other project, a laying plan is prepared in advance by PURASYS GmbH & Co. KG. This makes it easier for the installation team to lay the ballast mat and avoid errors during installation.

Longitudinal view of cleat Scale 1:50



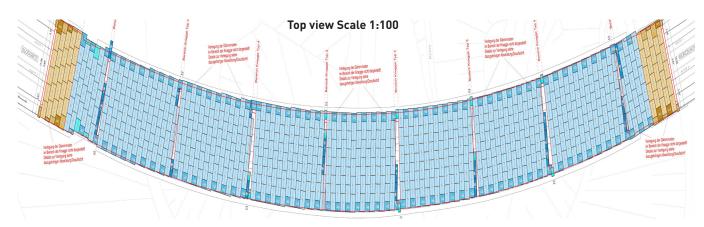


Installation procedure:

- 1. Cleaning the surface to be laid
- 2. Distribute the 2K-PU adhesive according to the following specifications: Adhesive horizontal surfaces:
 - 12 kg package (10 kg Körapur $672 + 2 \times 1 \text{ kg Köracur TH650}$) for spot bonding
- 3. Laying the MSS P/PN products
 - The transition area at the beginning and end of the bridge were each laid with 5m of building edge with the product PURASYS MSS P 4025.
 - PURASYS MSS P 3625 was installed in the main area. The main area was thus covered with a mat with minimal stiffness.
 - The heavily used concrete brake elements were laid using the product PURASYS MSS PN 3225 to dampen shear forces of the MSS plate.
- 4. The mat impacts were glued with a 10cm wide fabric Adhesive tape AT 169. This tape prevents the inflow from concrete / concrete milk into the mats joints.





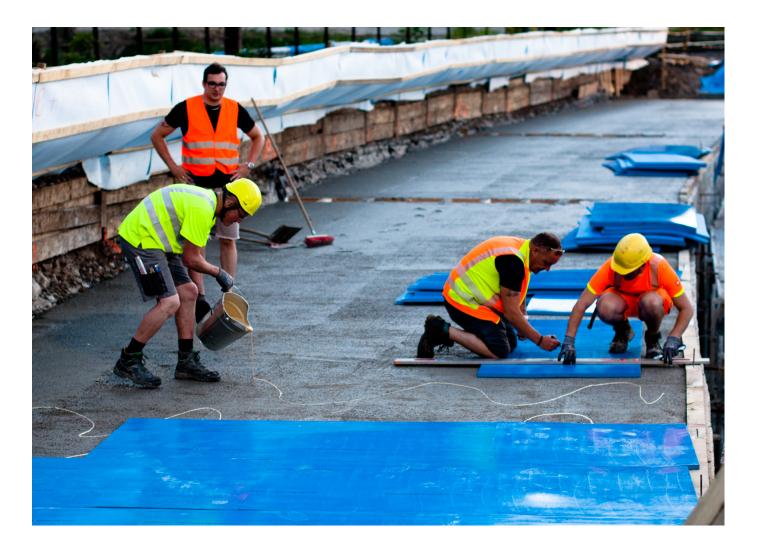




3. Technical data

Bearing for mass-spring system				
PURASYS MSS P/PN				
	Туре		PURASYS MSS PN 3225, MSS P 4025, MSS P 3625	
	Strength		25 mm	
	System	- 1	Full-surface installation on viaduct Mass-spring system with crushed stone in concrete trough as MSS	
	Amount		450 m²	

Track Vienna Main Station – Graz Main Station (ÖBB)				
Viaduct Kartner Kogel km 102,20				
	Track category		A/D4	
	Designed speed		160 km/h	
	Maximum axle loads		16 t / 22,5 t	







KRAIBURG PuraSys GmbH & Co. KG
Porschestraße 1 · D-49356 Diepholz
Fon +49 (0) 5441. 5954-0 · Fax +49 (0) 5441. 5954-24
info@kraiburg-purasys.com · www.purasys.com