



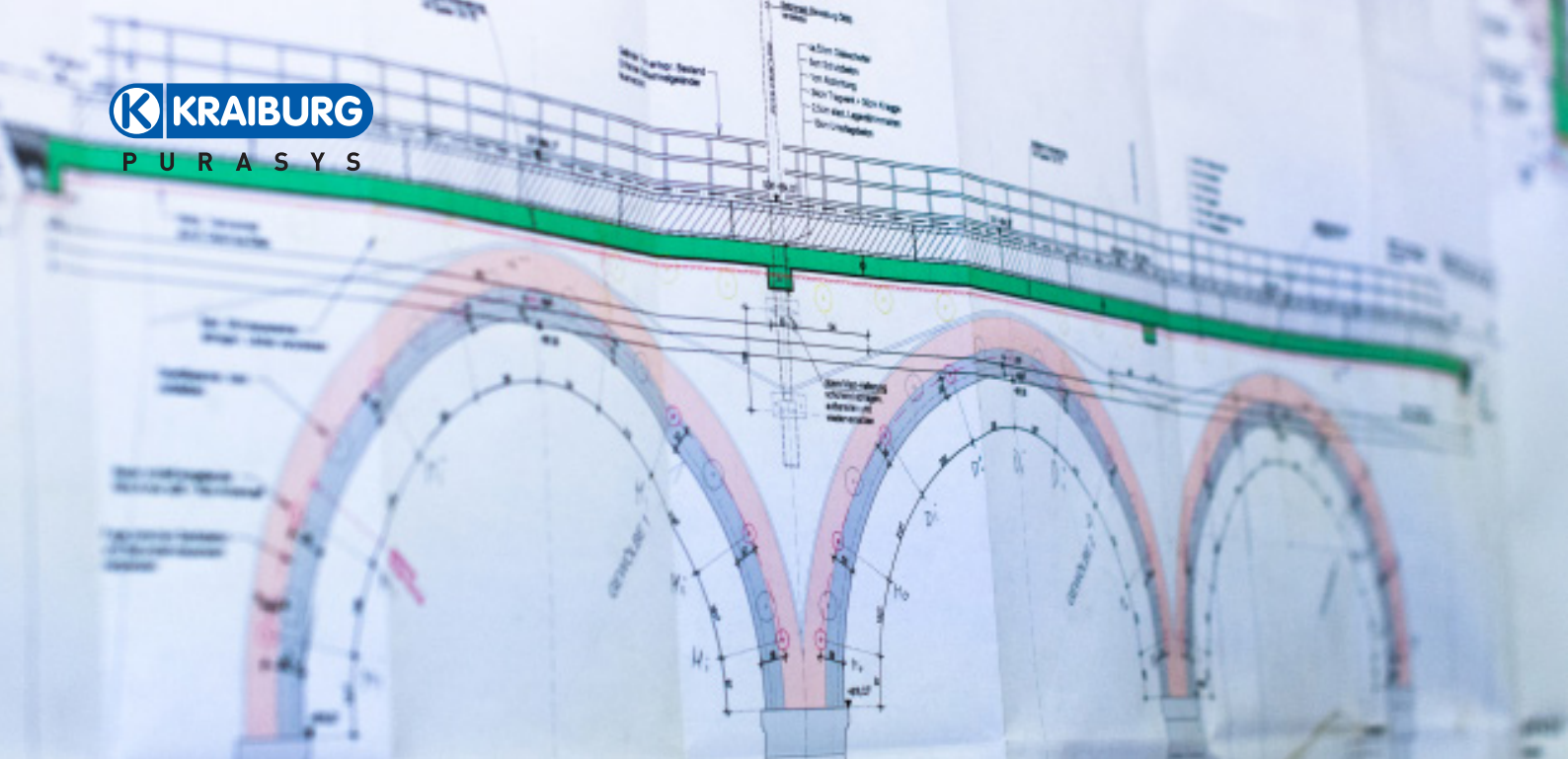
# Case Study

## Viaduct Semmering, Kartnerkogel, Austria

Mass-spring system with  
PURASYS MSS P/PN

Providing peace and quiet along the track.





## 1. Project

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

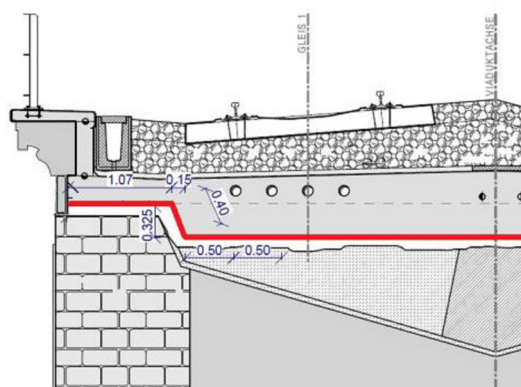
- Partial renovation of the 160-year-old protected as a historic railway
- The Semmering Railway was the first standard gauge mountain railway in Europe and has been a UNESCO World Heritage Site since 1998.
- Renewal of about ten kilometers of track and the associated switches. At the same time, the 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 railways. Around 180 trains travel over the challenging mountain range every day.
- In addition, the high traffic volume and seasonal temperature changes have affected 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









### 3. Technical data

#### Bearing for mass-spring system

##### PURASYS MSS P/PN

	Type	PURASYS MSS PN 3225, MSS P 4025, MSS P 3625
	Strength	25 mm
	System	Full-surface installation on viaduct Mass-spring system with crushed stone in concrete trough as MSS
	Amount	450 m <sup>2</sup>

#### 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](mailto:info@kraiburg-purasys.com) · [www.purasys.com](http://www.purasys.com)

© KRAIBURG PuraSys GmbH & Co. KG Alle Angaben ohne Gewähr. Änderungen vorbehalten.