# Kaposvár Intermodal Transport Centre (HU)

## Project description

The town of Kaposvár is a provincial centre that is situated in the southwest region of Hungary just 40 km south of Lake Balaton.

The construction of the intermodal transport centre that started in 2018 has been funded by the "Modern Cities Program" of the Hungarian Government and it aims to create a transport hub including the renovation and modernization of the complete infrastructure of the local railway station, a new bus station and a P+R carpark.

The most spectacular element of the project is the new cable-stayed pedestrian/bicycle flyover, which provides a better connectivity for the town that has been divided by the railway since 1897.

On the 8-meter wide flyover cyclists and pedestrians have separated lanes and at the north abutment of the structure an area for new shops was also established.

## mageba scope

Due to the long span of the flyover and its low structural damping, engineers calculated with a significant vibration that had to be reduced in order to protect the structure. mageba addressed this problem by supplying 2 Tuned Mass Dampers (TMDs) which protect the bridge from the adverse impact of vibrations.

TMDs feature a modular design and each consists of a mass, springs and individual dampers. The mass – in the form of layered steel plates – is mounted on the springs and equipped with viscous dampers. The tuned mass values of the dampers are 2,800 kg and 3,800 kg respectively.

In addition to the dampers, mageba also supplied 10 RESTON®SPHERICAL bearings to support the bridge deck.

## Highlights & Facts

**mageba Products:**

| | |
|---|---|
| Type: | Tuned Mass Dampers<br>RESTON®SPHERICAL bearings |
| Installation: | 2020 |

**Structure:**

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|---|---|
| City: | Kaposvár |
| Country: | Hungary |
| Type: | Cable-stayed bridge |
| Built: | 2019-2020 |
| Length: | 200 m |
| Owner: | Nemzeti Közútkezelő Zrt. |
| Contractor: | Swietelsky Építő Kft. |

The project is located in the downtown of Kaposvár, south of Lake Balaton in Hungary


One of the installed tuned mass dampers on the flyover

The structure is supported by RESTON®SPHERICAL bearings



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