RAILWAY SYSTEMS
by voestalpine

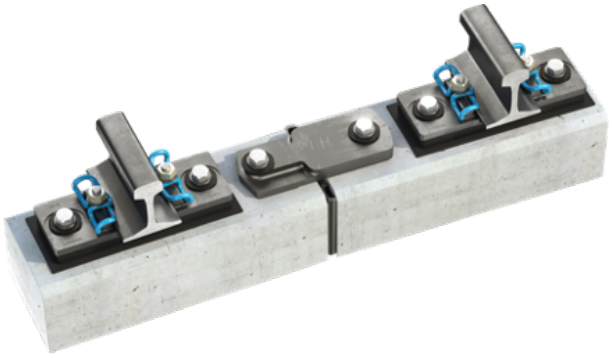
VIBRATION DAMPER SWT

Description

Large turnout parts, especially in the rear of the turnout, can reach such a width that it is not possible to load and transport them on standard vehicles when assembled.

In order to allow a pre-assembly in the turnout factory and transport to the installation site in spite of this width, the sleepers are divided and then reconnected at the installation site with the aid of elastic couplings.

In ballasted track turnouts vibration dampers are used as elastic couplings. The elastic properties of the coupling elements also ensure favorable ballast pressure and avoid an one-sided loading of the long sleepers.



System advantages

- Versions for concrete turnouts sleepers with through bolt connection (Swt 7/8), with adapter plate for dowel fastening (Swt 10/13) or with adapter plate for wooden sleepers (Swt 12)
- Acceleration and simplification of the transport and installation process
- Swt allows the exact positioning of the turnout segments to each other at the installation location
- Decoupling of both parts of the divided sleeper from deformations, vibrations and oscillations resulting from the dynamic excitations caused by a moving train
- Avoiding asymmetrical load effects and load transfer to sleepers and ballast
- Uniform ballast pressing over the entire sleeper area
- Avoidance of the “whip effect” (free oscillation of the unloaded sleeper part, especially with long sleepers (L >> 3 m) in connection with speeds of more than 140 km/h) and resulting excessive destabilization of the ballast bad in the unloaded track (usually in the branch track)

Vibration amplitude