

ELASTIC COUPLINGS SWT (VIBRATION DAMPERS)

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.

Added value

- » Acceleration and simplification of the transport and installation process
- » 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 ($L \gg 3$ m) in connection with speeds of more than 140 km/h) and resulting excessive destabilization of the ballast bed in the unloaded track (usually in the branch track)



VERSIONS FOR MANY SLEEPER TYPES

- » Connection of the divided long sleepers by the vibration dampers Swt
- » Swt allow the exact positioning of the turnout segments to each other at the installation location
- » Versions for concrete turnout 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)
- » Swt 8 as a shortened variant in confined spaces
- » Tolerances after assembling: max. 5 mm height offset, max. 10 mm horizontal offset
- » Use only in ballasted tracks



Elastic coupling for concrete sleeper with through bolt connection (Swt 7)



Elastic coupling with adapter plate for concrete sleeper with dowel fastening (Swt 10)



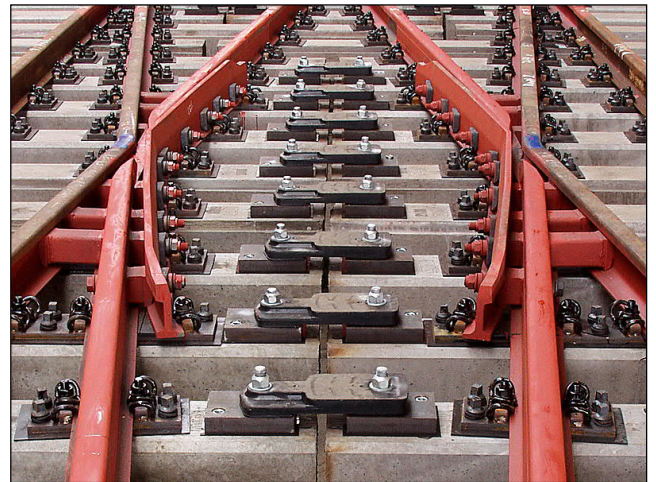
Elastic couplings in a diamond crossing installation



Crossover with bi-block long sleepers and elastic couplings



Elastic couplings with adapter plates in a complex track installation



Double crossover with bi-block long sleepers and elastic couplings with adapter plates

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