



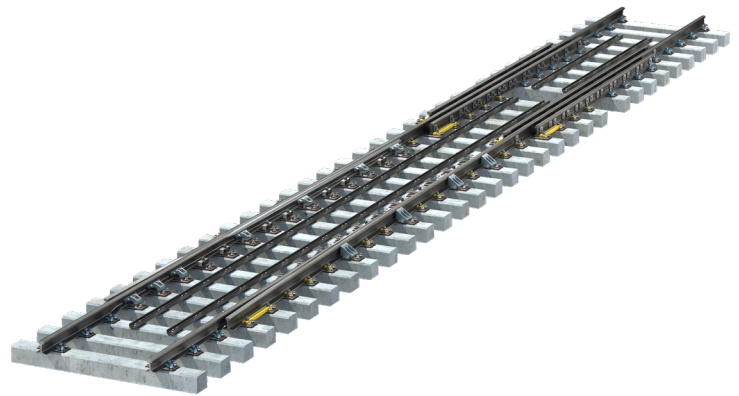
RAIL EXPANSION JOINT WITH MOVABLE STOCK RAIL

Rail expansion joint for long extension lengths

Description

Different longitudinal movements in the track can lead to excessive constraining forces in the rail that may cause damage to the superstructure.

In particular, at the transition from one substructure to another substructure, e.g. from a railway embankment to a bridge or from bridge deck to bridge deck, the different longitudinal movements (mainly due to temperature strains but also due to dynamic loads on the bridge) cannot be sufficiently compensated by the superstructure. This is where rail expansion joints (REJs) are used.



System advantages

- » Same overall height as many track systems
- » Suitable for ballasted track and slab track
- » Can be integrated into a wide range of track systems
- » Track gauge is virtually constant and independent of the expansion of the REJ
- » Different rail profiles and steel grades possible
- » Continuous wheel overrun
- » Can be provided with or without guard rail system



General

The REJ provides long extension lengths (up to $\pm 600\text{mm}$) with movable stock rails, fixed switch rails, and continuous wheel overrun. The switch rails have an asymmetric rail profile and are fixed elastically. In their moveable section the stock rails are guided on the outside and inside, and are supported laterally.

The rail expansion joint is equipped with concrete or wooden sleepers for ballasted track, but is also suitable for slab track.

Depending on the requirements, the rail expansion joint can be provided with or without guard rails.

In order to compensate for the wider sleeper spacing at a bridge joint, the stock rails are reinforced in this area by additional rails or supported on a steel girder.

Technical description

- » Rails: Rail grade R260, R350HT or R400HT (special grades on request).
- » Reinforcement of the switch rail in the front area is possible (TOZ)
- » Equipped with tension clamps, with e-clips or other fastening systems
- » Available in different gauges