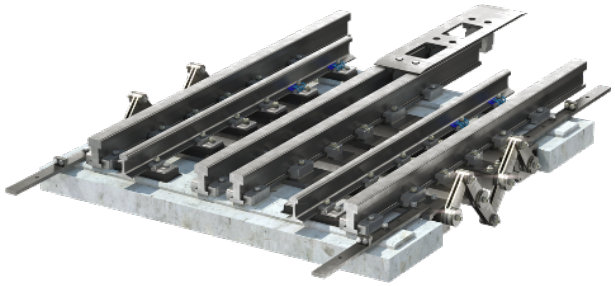
RAILWAY SYSTEMS
by voestalpine

RAIL EXPANSION JOINT REJ 1200 AD

Description

Different longitudinal movements in the track, e.g. due to temperature changes, may cause damages to the superstructure.

In particular at the transitions from one sub-structure to another, e.g. from the railway embankment to the bridge or from bridge deck to bridge deck, their different longitudinal movements cannot be sufficiently compensated by the superstructure.



System advantages

- Same overall height as many track systems (455 mm from top of rail to sleeper bottom)
- Suitable for ballasted and ballastless tracks
- Can be integrated in a variety of track systems with and without sleepers
- Different rail profiles and steel grades possible
- Track gauge is almost constant and independent of the expansion of the REJ
- Integration of a guard rail system is possible

Further description

This is where rail expansion joints REJ are used. The REJ 1200 advanced, in short REJ 1200 AD, was specifically developed for the heavy-duty transport field.

It is based on the rail extension joints type BWG, especially the REJ 1200 with its 1200 mm (± 600 mm) extension length, which are in use since many years, but it has been enhanced in such a way that it is now possible to pass it with axle loads of up to 30 t without problems.

Technical description

- Based on the proven technology of the REJ 1200: longitudinally movable stock rail and fixed switch rail for constant track gauge
- Arrangement of an auxiliary bridge over the bridge joint, consisting of 4 bridging beams and 2 longitudinally movable steel sleepers fixed to the bridging beams, which are centered in the bridge joint with a scissor system arranged in front of the sleeper heads
- Two additional bridging beams compared to the standard REJ 1200 in order to avoid exceeding the permissible rail deflection at maximum extension lengths and axle load
- Completely enhanced, reinforced scissor system
- Corrections of track gauge and/or lateral alignment are made by oval inserts in the elastic ribbed plates BWG ERL 17.5 - P or ERL 30 - P
- Ribbed sole plate BWG ERL 17,5 - P or ERL 30 - P

REJ 1200 AD in pre-assembly

auxiliary bridge with scissor system

guard rail system