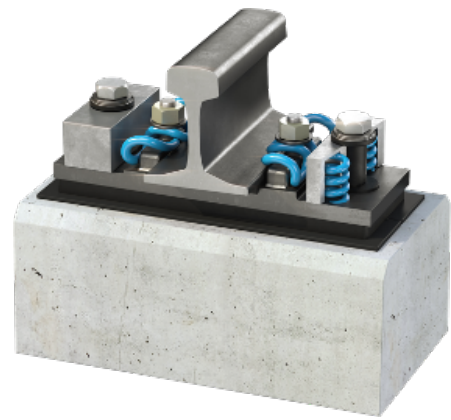


SPECIAL SUPPORT POINTS FOR TRANSITION AREAS ON BRIDGES

Description

In transition areas of the bridges, e.g. abutment-bridge deck and bridge deck-bridge deck on pillars uplifting forces are created in the rail support points adjoining directly to the bridge joint by deformations of the civil structure (expansion, shortening, deflection).

These forces arise from the torsion and offset of the bridge deck as a result of the bridge deck deformations.



System advantages

- » Universally applicable for different rail profiles and rail fastening systems
- » Creation of track-like conditions for deflection and load distribution
- » High availability by improving the position stability
- » Reduction of structure-borne noise
- » Low maintenance due to high-quality and durable components
- » Sustainable reduction of the maintenance costs of the superstructure

Technical description

- » Derived from the elastic ribbed plate support ERL 17.5 with its downwards directed support point stiffness of approx. 18 kN/mm and a very high support point rigidity directed upwards
- » Modification of the support point to achieve the required low spring stiffness in the uplifting direction: static support point stiffness of max. 20 kN/mm with a displacement of 1.5 mm
- » Static spring stiffness for the downward movement of 20 +/- 2 kN/mm for a deflection of 2.5 mm