



# W21

## Description

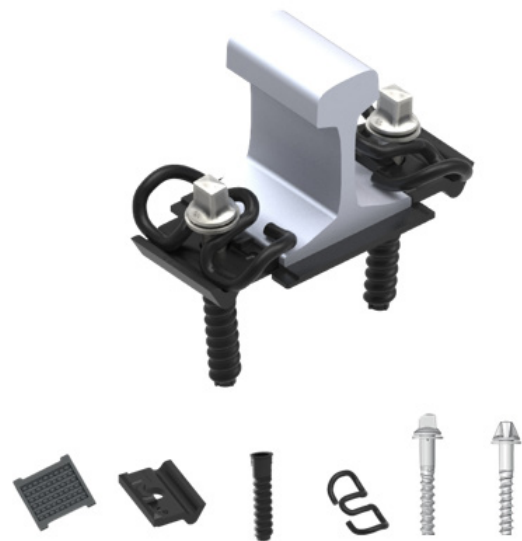
W21 type rail fastening system is designed for C and D category according to EN 13481-2 standard, with a maximum permissible axle load of 260kN and minimum curve radius of 150 meters.

This rail fastening system is provided with a rail pad of medium static stiffness equal to  $80 \pm 20$  kN/mm.

Due to the mid-loop of the SKL21 clip, which is mounted over the rail foot, this rail fastening solution is characterized by additional flexibility.

This eliminates the possibility of overloading the clip arms and their plastic deformation, as well as prevents rail rotation.

The use of different design of the SKL21 clamp, compared to SKL14, translates into the higher clamping force in the rail fastening nod of  $> 20$  kN.



The system meets the EN 13481-2 standard requirements.

## Technical aspects of W21 system

- » typical field of application – High Speed and Conventional Rail with concrete sleeper on ballasted track
- » axle load – max. 260 kN
- » speed – for HS  $\geq 250$  km/h, for CR  $\leq 250$  km/h
- » high rail longitudinal resistance – min. 9 kN
- » electrical resistance  $\geq 5$  k $\Omega$
- » clamping force for SKL21 (nominal) – min. 10 kN
- » gauge adjustment in the range of  $\pm 10$  mm
- » material of the rail pad: TPU, Foamed PUR, EPDM, Elastomers
- » possibility to use anti-thief screws with a triangle head shape
- » all of the components can be pre-assembled in the sleeper factory