RAILWAY SYSTEMS
by voestalpine

W21T

Rail Fastening System for Turnouts and Crossings

08-2026/V1

Description

The rail fastening system W21T (configuration for turnouts and crossings) is designed for C category according to the EN 13481-7 standard, with a maximum permissible axle load of ≤ 26 t and a minimum curve radius of ≥ 150 m for conventional rail (CR) and ≥ 400 m for high-speed rail (HS). The system is equipped with a highly elastic rail pad, which provides optimal elasticity and stiffness that can be adapted to specific project requirements.

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.

Technical aspects of W21T system

- typical field of application – High Speed and Conventional Rail with concrete sleeper on ballasted track
- axle load – max. 26 kN
- speed – for HS ≥ 250 km/h, for CR ≤ 250 km/h
- electrical resistance ≥ 3 kΩ
- clamping force for SKL21 (nominal) – min. 9 kN
- gauge adjustment in the range of ± 10 mm
- possibility to use anti-thief screws with a triangle head shape
- all of the components can be pre-assembled in the sleeper factory
- Inclined plates (optional): This configuration can include optional inclined plates.

voestalpine Railway Systems
www.voestalpine.com/railway-systems

voestalpine
ONE STEP AHEAD.