

SD-RE

Fastening Systems

Adding Value

A proven futureproofing fastening system that provides the ability to tune track performance quickly.



Pandrol's SD-RE is a durable and reliable threaded fastening solution that has been developed to fit in W shaped rail seats.

SD-RE can deliver higher rates of construction thanks to its efficient controlled clip guidance from 'parked' to the 'in-service' position.

The system is characterised by a more compact and robust design with a lower carbon footprint.

Its optimised geometry also enables automatic installation, resulting in improved efficiency and cost savings during installation and maintenance.

SD-RE also offers various advantages over legacy screwed systems, such as avoiding ballast entrapment in the fastenings and an improved sealing of the dowel to protect the sleeper.

→ TECHNICAL FEATURES

SKL conversion

SD-RE products can be installed in a W-shaped rail seat, providing a simple retrofit upgrade.

Captive fastening

SD-RE sleepers can be supplied to sites fully pre-assembled, with all components remaining captive during construction and maintenance activities.

Eco-design

Compared to other screwed solutions, the system has been designed to reduce the environmental impact and cost of logistics without compromising on performance.

Robust and durable

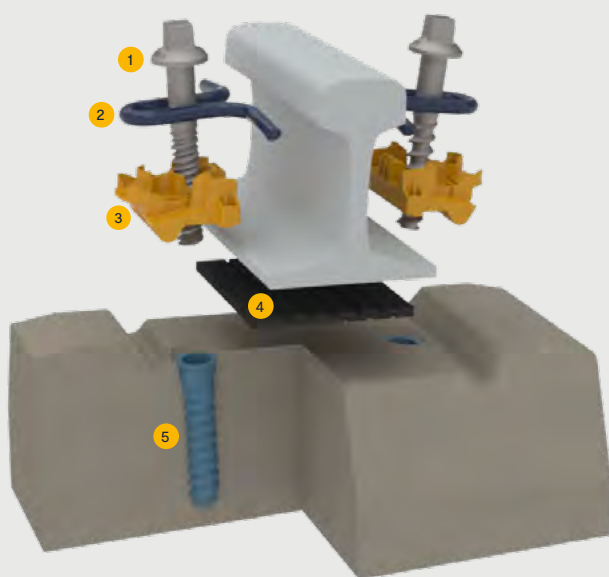
Designed to avoid frequencies where destructive amplitudes are generated, causing the clip to fail in fatigue. A significant increase in the natural frequency is key to increase the robustness of the tension clamp.

Innovative geometry

Pandrol SD-RE's innovative geometry increases the contact area between the clip and the rail, thereby solving the issue of ballast entrapment commonly experienced with SKL tension clamps.

→ ADVANTAGES

- The SD-RE system's pre-assembled captive fastening units enable very high rates of track construction and maintenance. This efficiency translates into huge savings in labour, as well as reduced distribution and handling costs throughout the system's lifecycle.
- SD-RE is suitable for most track infrastructure and can meet a wide range of customer requirements for stiffness, adjustment, and rail clamping force. It can also be designed for use in small spaces such as turnouts, allowing customers to keep the same type of fastening throughout the track.
- The SD-RE is an environmentally-friendly fastening solution, which reduces the product's carbon footprint, logistics costs and environmental impact.
- The SD-RE system has been designed to avoid frequencies that cause fatigue and failure, resulting in a significant increase in the robustness of the tension clamp and a longer lifecycle.
- The innovative geometry of the SD fastening improves track stability, prevents dust and impurities from entering the dowel, and solves the problem of ballast entrapment.
- The SD-RE can provide a simple retrofit upgrade for SKL fastenings.



→ COMPONENTS

1. Coachscrew
2. SD clip
3. Lateral insulator
4. Rail pad
5. Dowel

→ SPECIFICATIONS

Assembly performance data

Recommended categories	A, B, C, D
Type of track	Ballasted
Rail inclination	1/40 or 1/20 (typical)
System type	SD
Static stiffness	> 60 MN/m
Dynamic stiffness	> 60 MN/m
Lateral adjustment	± 7.5 mm
Gauge adjustment	± 15 mm
Electrical insulation	> 12 kΩ

Performance values can be varied, depending on product configuration. For any other configuration, please contact us.

Standard compliance

- EN 13481
- EN 13146

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