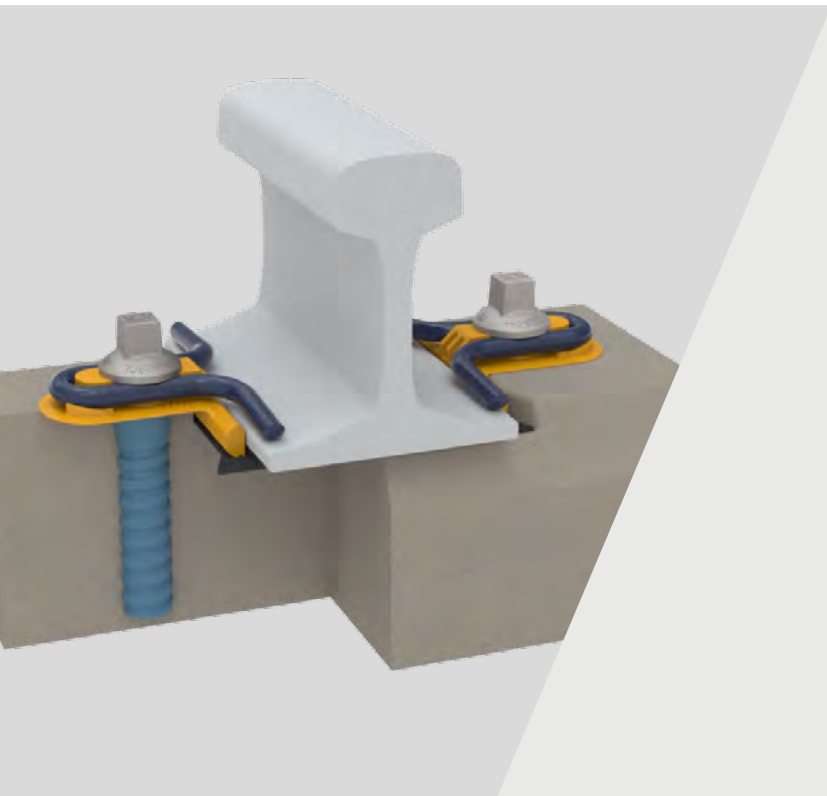


SD-E

Fastening Systems

Adding Value

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



Pandrol's SD-E is a durable and reliable screwed fastening solution that has been specially developed to minimise the CO2 impact of the railway track for Cat B and Cat C applications.

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

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

→ TECHNICAL FEATURES

Captive fastening

SD-E 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

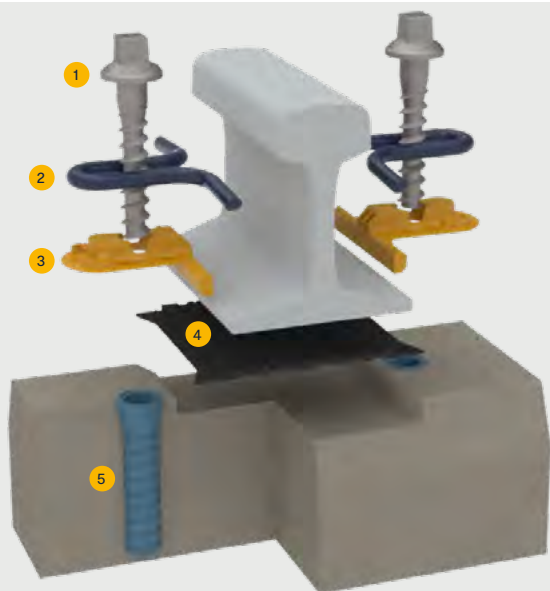
Designed to avoid frequencies where destructive amplitudes are generated, causing the clip to fail in fatigue. A significant increase in the natural frequency is key to increase the robustness of the tension clamp.

Innovative geometry

Pandrol SD-E'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-E 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.
- The SD-E is an extremely environmentally-friendly fastening solution which reduces the product's carbon footprint, logistics costs and environmental impact.
- The innovative geometry of the SD fastening improves track stability, prevents dust and impurities entering from the dowel, and solves the problem of ballast entrapment.



→ 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 / slab track	
Rail inclination	1/40 or 1/20 (typical)	
System type	SD	
	Slab track category A	Ballasted track category C
Static stiffness	40 MN/m	95 MN/m
Dynamic stiffness	< 40 MN/m	< 130 MN/m
Lateral adjustment	± 5 mm	± 6 mm
Vertical adjustment	± 2 mm	Not applicable
Gauge adjustment	± 10 mm	± 12 mm
Electrical insulation	> 7 kΩ	

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

Standard compliance

- EN 13481
- EN 13146

→ LEARN MORE



www.pandrol.com