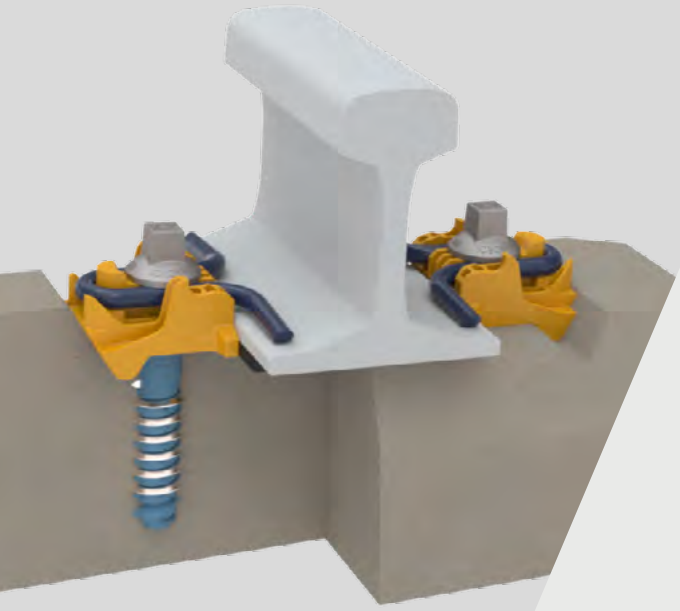
PANDROL
Partners in excellence

SD-GPE

Fastening Systems

Adding Value

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



Pandrol's SD-GPE is a durable and reliable threaded fastening solution.

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

This system has been specifically developed for the Grand Paris, in partnership with SGP (Société des Grands Projets).

TECHNICAL FEATURES

Captive fastening

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

Robust and durable

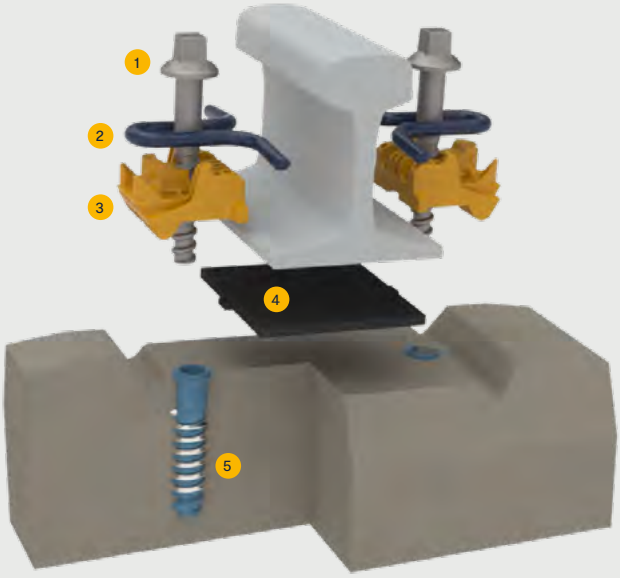
Designed to avoid frequencies where destructive amplitudes are generated, causing the clip to fail in fatigue. A significant increase in the natural frequency is key to increase the robustness of the tension clamp.

Innovative geometry

Pandrol SD-GPE'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-GPE system's pre-assembled captive fastening units enables 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-GPE 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-GPE 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 entering from the dowel, and solves the problem of ballast entrapment.



COMPONENTS

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

SPECIFICATIONS

Assembly performance data	
Recommended categories	A, B, C
Type of track	Slab / ballasted
Rail inclination	1/40 or 1/20 (typical)
System type	SD
Static stiffness	107 MN/m
Dynamic stiffness	167 MN/m
Lateral adjustment	± 8 mm
Vertical adjustment	+ 10 mm (+ 70 mm optional)
Gauge adjustment	± 16 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

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