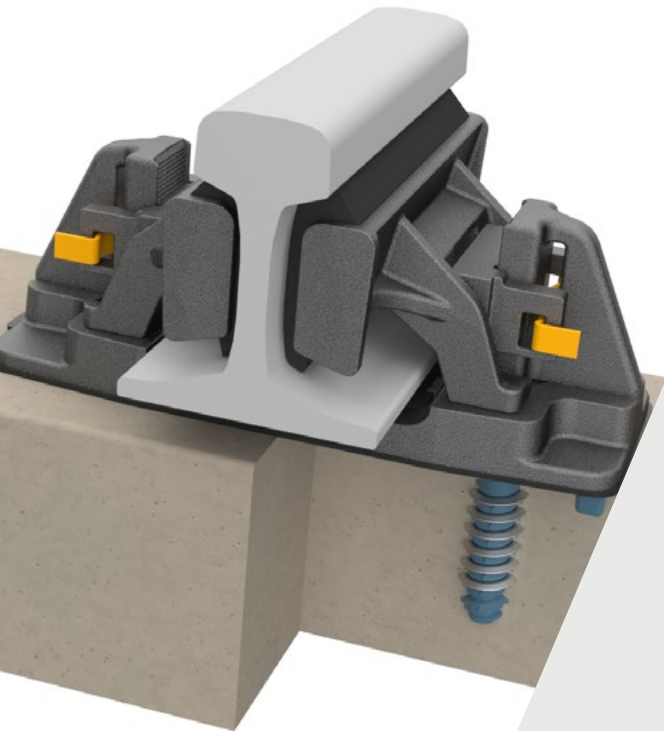


Vanguard Common Interface

Fastening systems

Common Interface Range

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



The Vanguard Common Interface fastening system adds an unequalled level of futureproofing to slab panel constructions.

As its name suggests, the assembly fits on a common interface and is fully interchangeable with a range of fastenings, including FCA and DFC. As a result, when noise and vibration mitigation requirements change, rather than having to modify or replace the whole track, the fastening system can simply be swapped.

Vanguard offers all the advantages of a regular Vanguard fixing, including very low vertical stiffness and high levels of vibration isolation and adjustability. A wide range of vertical and lateral adjustments can be achieved with minimal tools and components, allowing for efficient heave and gauge adjustment and correction for track settlement.

→ TECHNICAL FEATURES

Common interface

The Vanguard assembly is interchangeable on Pandrol's common interface with FCA and DFC fastening systems, to allow for different levels of stiffness (resilience) without changing the substrate.

Vertical and lateral adjustment

With the addition of a raiser, vertical height corrections of up to 25 mm can be made in 1mm intervals. Total track gauge adjustment of 10 mm (5 mm per rail seat) can be made.

Indirect rail holding

The Vanguard indirect rail holding mechanism is separate from the concrete substrate.

Efficient maintenance

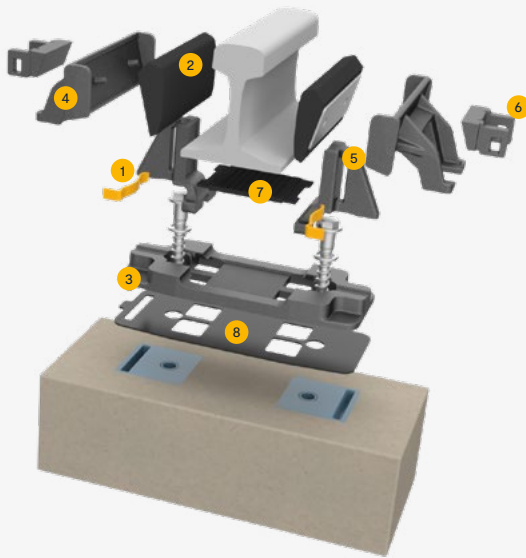
The system has been designed to 'fit and forget', with very little maintenance required. Minimal special tools are needed for installation and maintenance.

Recyclability

The Vanguard is composed of recyclable materials.

→ ADVANTAGES

- The high degree of flexibility offered by being able to change the fastenings on the common interface allows for greater futureproofing of non-ballasted track than in the past. Where noise and vibration concerns demand changes to stiffness, instead of having to modify or rebuild the whole track, the fastening system alone can be changed. This saves time, results in minimal disruption to track access and reduces cost.
- The Vanguard has been designed for ease of installation and maintenance with minimal special tools, saving time and reducing equipment needed.
- With a very low stiffness assembly (5 MN/m), the Vanguard results in high levels of vibration mitigation.
- The system provides full electrical insulation and corrosion protection.
- Pandrol's common interface system simplifies tooling and training for concrete plants.
- The use of recyclable materials avoids waste, helps to reduce CO₂ emissions, and contributes to the overall sustainability of the railway.



COMPONENTS

1. Retaining clips
2. Side Rubbers
3. Cast iron baseplate
4. Cast iron side plates
5. Cast iron shoulders
6. Cast iron wedges
7. Rail pad
8. Baseplate shim
9. Plastic construction plate

→ SPECIFICATIONS

Assembly performance data

Recommended categories	A, B, C, D
Type of track	Ballasted, Slab
Rail inclination	1/20 or 1/40 (typical)
System type	Vanguard
Static stiffness	> 5 MN/m
Dynamic stiffness	> 6 MN/m
Lateral adjustment	± 5 mm
Vertical adjustment	N/A
Gauge adjustment	± 10 mm
Electrical insulation	> 25 kΩ

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

Standard compliance

- EN 13146 / Arema Test Methods

→ LEARN MORE



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