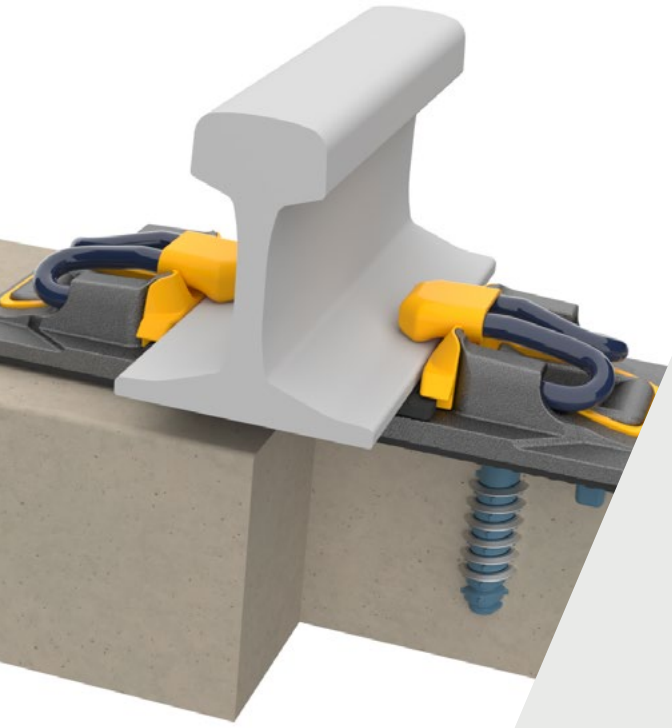
PANDROL
Partners in excellence

DFC Common Interface

Fastening systems

Common Interface Range

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



Pandrol's DFC Common Interface has been designed to futureproof non-ballasted track. As its name suggests, the fastening assembly fits on a common interface and is fully interchangeable with a range of fastenings, including FCA and Vanguard. 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.

The DFC offers all the advantages of a double resilience Fastclip baseplate system in terms of safety, reliability and durability. 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 DFC shares a common interface that can accommodate FCA, DFC and Vanguard fastening systems, allowing for different levels of stiffness (resilience) without changing the substrate.

Vertical and lateral adjustment

With the addition of a raiser, corrections of up to 60 mm can be made to the rail head height. If ground heave is a possibility, raisers can be incorporated into the DFC for ease. Total track gauge adjustment of ± 40 mm (± 20 mm per rail seat) can be made by adjusting the gauge of interchangeable side post insulators to move the rail within the baseplate (the baseplate remains fixed).

Recyclability

The DFC is composed of recyclable materials.

Indirect rail holding

DFC is an adjustable indirect rail holding mechanism that, being separate from the substrate and with two pads (rail and baseplate), provides a high levels of sound, vibration and electrical insulation.

Fastclip compatibility

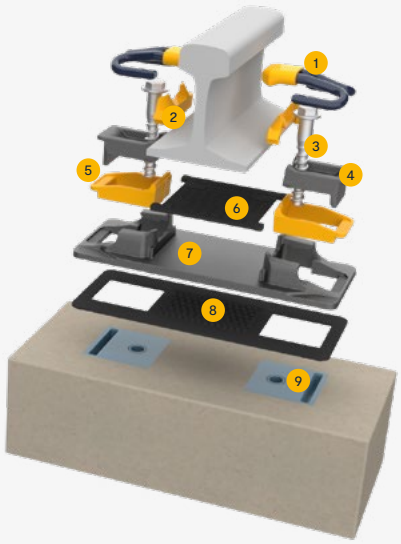
The DFC is fully compatible with Fastclip rail fastenings, with a clip 'park position' included on its shoulders. Fastclip's compatibility with automated clipping machines allows for rapid clipping and unclipping.

Efficient maintenance

The system has been designed to 'fit and forget', with minimal maintenance. Its shoulders include features to allow Pandrol de-stressing rollers to be fitted, increasing maintenance efficiency.

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 DFC has been designed for ease of installation and maintenance with minimal tools, cutting maintenance inventory and time.
- The DFC can be fitted with a low stiffness assembly (16–25 MN/m), resulting in exceptionally low ground-borne vibration.
- The system provides full electrical insulation and corrosion protection.
- Available in low toe load and zero longitudinal restraint (ZLR) configurations, the DFC is suitable for bridge and viaduct applications. It can be used for stiffness transitions using variable stiffness rail and baseplate pads.
- The commonality of the DFC simplifies tooling, inventory and training for concrete plants.



COMPONENTS

1. Clip and Toe insulator (ZLR and low toe load option available)
2. Side-post insulators
3. Anchor screws
4. Cast iron clamps
5. Insulator clamps
6. Rail pad
7. Cast iron baseplate
8. Base plate pad
9. Plastic construction plate

SPECIFICATIONS

Assembly performance data	
Recommended categories	A, B, C, D
Type of track	Slab
Rail inclination	Provided in the baseplate or concrete as required
System type	Fastclip FC
Static stiffness	> 16 MN/m
Dynamic stiffness	> 18 MN/m
Lateral adjustment	± 20 mm
Vertical adjustment	Up to + 60 mm
Gauge adjustment	± 40 mm
Electrical insulation	> 10 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

www.pandrol.com

V1.1-0426