

PANDROL

FASTCLIP FD



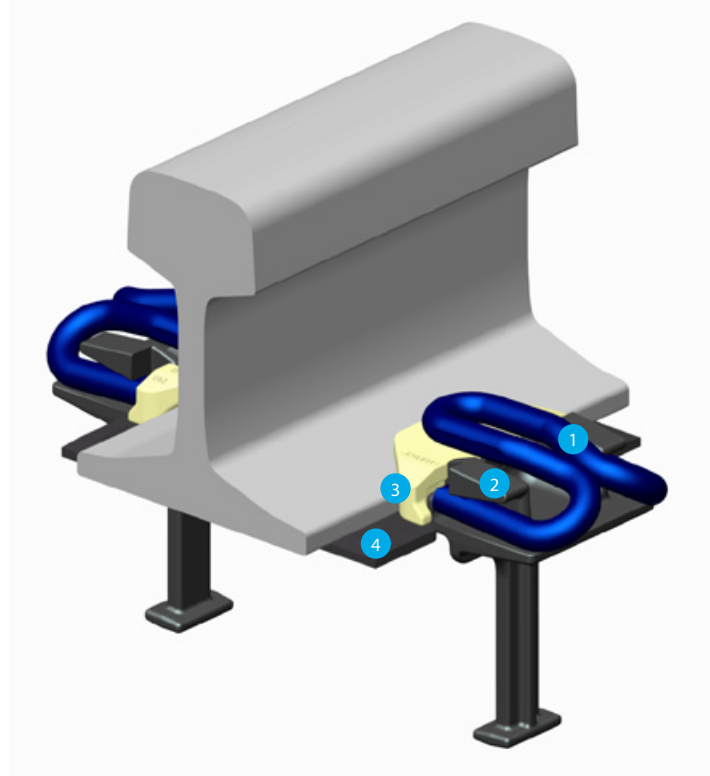
PRODUCT INFORMATION



RAIL FASTENING SYSTEM:

FASTCLIP FD

The PANDROL FASTCLIP FD railway fastening system supports mainline track and traffic conditions where dynamic loading, tractive forces and thermal forces are weaker than on typical high speed and heavy haul railways.



FASTCLIP FD is most suitable for railways that operate low and medium density operations. Rail sections up to 50 kg, with speeds up to 120 km/hr, and maximum axle loads of 20 tonnes, are supported.

Find more information about the FASTCLIP range at [Pandrol.com](https://www.pandrol.com)

[LEARN MORE >](#)



The FASTCLIP FD system is available in 13 mm and 14 mm diameter clip sizes, generating clamping forces of >13 kN and >15 kN respectively. For other operating requirements, please consult PANDROL.

Components:

- 1. PANDROL FASTCLIP FD clip**
- 2. SGI shoulder (cast or hook in)**
- 3. High-viscosity nylon insulator**
- 4. EVA rail pad**

The FASTCLIP FD system can be installed and extracted using hand tools or simple hydraulic machines. The product is suitable for use with concrete and steel sleepers.



INSTALLATIONS



SRI LANKA

FD1300 installation in Sri Lanka, 1999.



CAMBODIA

Construction of North-South Railway, Cambodia.



FD1408 on steel sleepers, Sri Lanka.



FD1408 on concrete sleeper.



FD1300 trial on steel sleepers, Vietnam.



FD1408 on steel sleepers, Sri Lanka.



Machine installation, Corsica.

FEATURES OF ASSEMBLY

ECONOMICAL

The PANDROL FASTCLIP FD system provides a low-cost solution for medium-density railways that typically operate with 20T axle loads or less.

A MORE FLEXIBLE CLIP

The system offers generous amounts of lateral adjustment for gauge widening, and a variety of rail sizes in the rail seat.

LOWER MAINTENANCE

FASTCLIP FD is a threadless fastening system that provides low maintenance operation.

MANY APPLICATIONS

The FASTCLIP FD system is designed to work with steel and concrete sleepers. FASTCLIP FD can also be applied to baseplates for timber application.

INSTALLATION OPTIONS

FASTCLIP FD clips can be installed using hand tools or machinery. Sleeper handling can be assisted by use of lifting hooks and chains over cast shoulders.

PANDROL

FASTCLIP FD SYSTEM

- For general mainline track, secondary lines and lines carrying light traffic.
- Works with concrete and steel sleepers
- For other applications please consult PANDROL

Application data (Standard products – special variants may differ)

Rail inclination	As provided in the sleeper		
Pad type	Typically HDPE or EVA		
Typical applications	General main line		
Clip Type	PANDROL FASTCLIP FD1300/FD1400 Series		
EN 13481-2 and -4 Track Category	Cat A	Cat B	For max axle load Radius please Consult Pandrol
Maximum Axle Load*	130 kN	180 kN	
Minimum Curve Radius*	40 m	80 m	

* For Special applications consult PANDROL

Typical performance data* As identified by Track Category in EN13481-1

	Cat A	Cat B	Test method	Remarks
Assembly static stiffness	>90 kN/mm	>100 kN/mm	EN 13146-9:2011	Dependent upon pad selection
Assembly dynamic stiffness	>100 kN/mm	>110 kN/mm	EN 13146-9:2011	
Impact load attenuation	≤ 30%		EN 13146-3:2012	
Electrical insulation	>5 kΩ		EN 13146-5:2012	
	FD1300 Series	FD1400 Series		
Nominal toe load	750 kgf	850 kgf	Clip driving fixture	
Clamping force	>13 kN	>15 kN	EN 13146-7:2012	
Creep resistance	>7 kN	>7 kN	EN 13146-1:2012	

COMPLIANCE WITH STANDARDS:

PANDROL FASTCLIP FD fastenings are fully compliant with the requirements of EN 13481-2:2012 and 13481-4:2012, for track categories A and B.

NOTE:

PANDROL is an innovator and designer of bespoke rail fastenings. The data shown above is indicative of typical performance, but is naturally dependant on external factors. Should you have different requirements, please contact us to discuss tailoring products to suit local operating conditions. The technical information given in this brochure was correct at the time of printing, however the company undertakes a continuing programme of research and development and improvements may since have been introduced.

ISSUE 4 2015

PANDROL TRACK SYSTEMS

63 Station Road
Addlestone, Surrey
KT15 2AR
England

Telephone: **+44 (0)1932 834500**
e-Mail: **info@pandrol.com**
Website: **www.pandrol.com**



© DELACHAUX GROUP