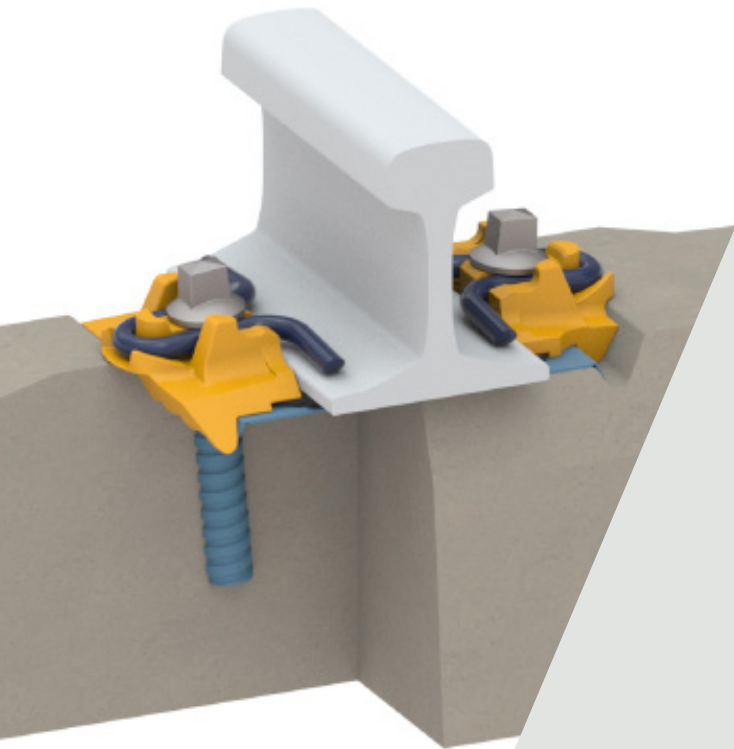


SD-HH

Fastening systems

Adding Value

Retrofitting the SD-HH fastening system at the Freeport Mine in Indonesia has allowed previously unachievable gauge widening on curves, increasing track life and reducing maintenance and repair costs.



Pandrol's SD-HH (Safe Driven, Heavy Haul) is a durable, reliable, direct screw assembled fastening system that is suitable for most heavy haul applications.

The SD-HH fastening system is quick and efficient to install using simple tools and minimal training. The fastening is easily and accurately driven from a secure parked position to the installed position on the rail foot. Maintenance requirements are low.

The SD-HH fastening system can be pre-assembled on the concrete sleeper in the factory or retrofitted to existing track infrastructure. It is fully interchangeable on W14 sleeper profiles and can be used to upgrade SKL fastenings, providing the opportunity for increased gauge widening.

→ TECHNICAL FEATURES

Captive fastening

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

Switch-on/switch-off function

The SD-HH clip can be moved quickly from the parked position (in which it is held securely without intruding into the rail seat) into the service position. With the screw loosened, the clip is simply pushed from one position to the other to either clamp or release the rail.

Clamping force

The high elasticity of the SD-HH clip and a fixed installed position ensures the correct clamping force. As a result, a consistent longitudinal restraint is achieved automatically when screws are tightened until full contact is made.

Gauge adjustment

Accurate lateral rail adjustment is achieved by changing the guide plate insulators for different sizes in required increments, by steps of 2.5mm.

Track-structure interaction

The SD-HH clip is available in low toe load and a zero longitudinal restraint (ZLR) configuration, typically for use on bridges and viaducts when track-structure interaction effects need to be dealt with in the rail fastening assembly.

SKL conversion

SD-HH can be installed in an SKL-shaped rail seat, providing a simple retrofit upgrade.

→ ADVANTAGES /

- Very high rates of track construction and maintenance can be achieved with SD-HH fastenings thanks to pre-assembly, the switch-on/switch-off function, and the option of using mechanised equipment. This saves time, labour and distribution costs throughout the system's lifecycle.
- Available in a range of different configurations and highly adjustable (both laterally and vertically), the SD-HH is a versatile solution that is suitable for most track infrastructure and meets a wide range of customer requirements for stiffness, adjustment, and rail clamping force.
- The SD-HH clip can be designed for use in small spaces such as turnouts, allowing customers to keep the same type of fastening throughout the track.
- Compared to similar products, the clip is relatively low weight. This reduces its environmental impact without compromising on performance.
- The fastening system has been designed to protect the sleeper from abrasion.
- The SD-HH can provide a simple retrofit upgrade for SKL fastenings, offering a gauge widening option of up to +15mm (compared to SKL's +8mm).



→ COMPONENTS /

1. Insulator
2. SD Heavy Haul Clip
3. Dowel
4. Screw