PANDROL
Partners in excellence

On Sleeper Beam

Signalling

The Pandrol On-Sleeper Beam Balise Mounting System (BMS) is used to install balises (transponders) into track securely and efficiently.

Balises are used as beacons on European Train Control Systems (ETCS) to provide data through communication with train borne receivers. Their accurate positioning and secure fitting are vital to ensure the reliability of the safety critical data they transmit.

The On-Sleeper Beam is mounted over the sleeper onto the existing rail fastening, eliminating the need to drill the sleeper. Its design ensures that balises are installed in a compliant position, significantly simplifying the installation process and saving time and money. The On-Sleeper Beam has been developed to withstand the adverse track environment and has been subject to rigorous approval processes around the world.

TECHNICAL FEATURES

Compatibility

The On-Sleeper Beam is compatible with a range of track formations and with Siemens, Alstom, Bombardier and Hitachi balises. It can be installed on a wide range of sleeper types and is compatible with a range of track formations.

Resistance

It is vibration resistant to EN50125-3. It also has high resistance to chemical and climactic changes.

Non-conductivity

The On-Sleeper Beam's non-conductive design ensures that it does not interfere with existing signalling systems.

Secure fastening method

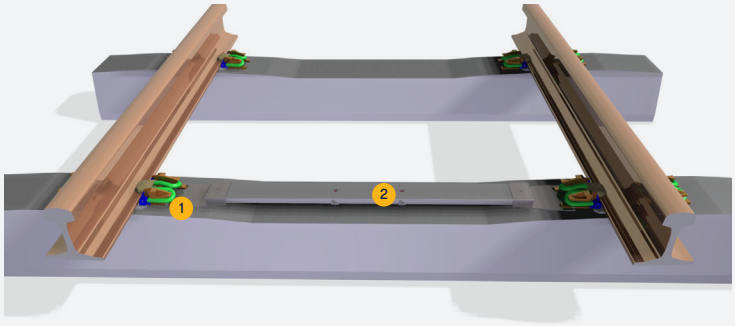
Its proven secure fastening method comprises a glass reinforced plastic (GRP) beam with stainless steel yokes that use the existing rail fastenings to hold the beam in track.

Designed for non-intrusive, rapid installation

When installing the On-Sleeper Beam, there is no need to modify the track or drill into concrete sleepers. Installation, repositioning or removal typically takes less than two minutes per balise and there is no wait for resins to cure.

ADVANTAGES

- The On-Sleeper Beam is simpler to install, reposition and remove than other products. Eliminating the need for drilling into concrete sleepers, digging ballast and tamping saves time and reduces labour costs.
- Additional money is saved because the need for track possession during installation is eliminated or reduced.
- When balises are installed using the On-Sleeper Beam, lifetime ownership costs incurred as a result of repositioning for verification trials and maintenance are significantly reduced.
- The On-Sleeper Beam's simple, non-intrusive installation can be done using commercially available hand tools.
- Positioning the balise over the sleeper means that the product is compatible with automatic track tamping machinery.
- With installation typically taking less than two minutes per balise, the length of time that a track worker is in a position of danger is reduced.



COMPONENTS

1. Stainless Steel yoke
2. GRP beam

SPECIFICATIONS

Environment Specifications		
Temperature	-40 to 55 °C	DIN EN 60068-2-1 DIN EN 60068-2-2
Temperature cycling		DIN EN 60068-2-14
Humidity	90-100% Rh @ 55 °C	DIN EN 60068-2-30
Vibration and shock	EN50125-3-On Rail Levels	DIN EN 60068-2-64 DIN EN 60068-2-27
Fire retardancy	UL94-V0	
Electrical isolation	BS EN 13146-5:2012	

APPROVALS

- UK – Network Rail, PS05/05714
- Germany – EBA
- Switzerland – BAV
- Finland – RHK
- Australia – TfNSW

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