

## Contacts

Joe Williams  
[joe.williams@hirds.co.uk](mailto:joe.williams@hirds.co.uk)  
07979 850194

Adam Elliott  
[adam.elliott@hirds.co.uk](mailto:adam.elliott@hirds.co.uk)  
07979 850193

HIRD RAIL SERVICES LTD  
BARTON LANE  
ARMTHORPE  
DONCASTER  
DN3 3AB

## **Ref. Hird Rail Services Protective Coating for Insulated Block Joints (IBJs)**

### Background

In 2016 HRS was asked by a European customer to supply and design a new Coated IBJ capable of meeting the following specification:

- Hard wearing
- Electrically resistant
- Durable
- Waterproof
- High insulation properties
- minimum/maximum cured coating thickness
- High resistance to UV exposure
- Minimum of 15 years guaranteed IBJ life expectancy

HRS' protective coating was subject to a thorough and extensive programme of testing:

- Life cycle testing at manufacturer's laboratory
- Sample testing at purpose-built coating facility in Doncaster
- 52-hour saltwater test
- Pull test on coating for proof that coating remains on fishplate
- In-track testing on customer's rail infrastructure

**HRS have now supplied in excess of 5000 Coated IBJS since 2016 with NO reported faults.**



## **UK Infrastructure**

HRS have initiated talks with Network Rail to look at rolling out Coated IBJs for installation in the UK to increase IBJ life expectancy in problem areas:

- Coastal routes exposed to saltwater
- Level crossings subjected to salt and grit spreading
- Locations such as tunnels where metal filing debris often accumulates
- Locations with high humidity

## **Product Features**

Wear protection against:

- Erosion
- Abrasion

Corrosion protection against:

- Water & Saltwater
- Acid & alkaline
- Oil & grease

## **Product Info**

- Specially developed two-part epoxy coating which contains ceramic powder
- Ceramic powder provides excellent protection against abrasion & impact
- Already used to protect train axles from ballast strikes and corrosion
- Gloss finish with a film thickness of ~250-300µm