



FOCUS ON

Track Components - Insulated Rail Joints

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LB Foster Rail Technologies manufactures and distributes a complete range of Rail Joint Kits and Track Fastening products for the railway market.

Rail Joint Kits are available for bonded and dry insulated applications as well as non-insulated standard rail joints. With over 50 years of manufacturing expertise for the rail market the company has built up unrivalled knowledge and experience in the supply of track bolts, switch and crossing fasteners, screwspikes, direct fixation fastenings, rail anchors and drive spikes.

Insulated Rail Joints

Promoted via the Coronet brand, LB Foster Rail Technologies has become established as Europe's foremost manufacturer of insulated and non-insulated rail joint kits.

LB Foster, under the Coronet banner, has a long established history of supplying glued and dry Insulated Joint kits in the UK, where it has been the leading supplier to the Network Rail infrastructure for over 15 years. This position is supported by a high level of export sales to a variety of territories worldwide.

With unrivalled knowledge of rail joints for passenger rail networks, LB Foster Rail Technologies has been able to draw on the experience of our North American based sister company, Allegheny Rail Products. Together, we have developed a series of heavy duty joints for freight and high traffic environments throughout Europe.

Glued Insulated Joint Kits

Having been involved in glued insulated joint kit design and manufacture for a long period of time the company can draw on substantial experience in this field.

Well researched core principles are today merged with modern state of the art design and test facilities. The result is the production of high quality, insulated joint kits that meet or exceed clients' expectations.

Site Glued Joint Kits

Individual kits for on site assembly are available from LB Foster Rail Technologies:

- 1. Coronet Site Glued Kit** – a high strength, pre-insulated wedge fit design that is bonded to the rail using a rapid curing toughened epoxy resin system. The resin is supplied in individual cartridges to suit the rail section and application involved. Site glued joint kits are typically bolted using high tensile threaded fasteners, however other fastening systems have been supplied to suit customers' own requirements.

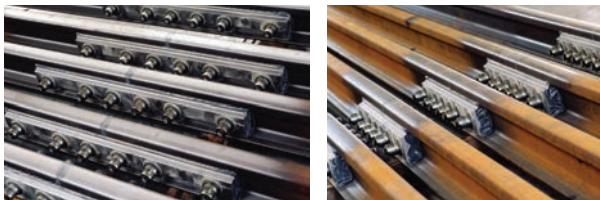


- 2. Thermabond Kit** – a high strength, full web fit design which is supplied as a loose component kit that incorporates a pre-impregnated insulating liner. The liner bonds to the joint bar and rail after being activated by the application of heat post tensioning of the bolts.



Workshop Glued Joint Kits

Kits supplied for workshop applications are supplied pre-assembled. They have a high strength insulating layer bonded to the fishing angle and web faces with the bolt-holes insulated using glass reinforced epoxy resin bushings, thus providing superior compressive strength performance.



Kits are manufactured in a wide variety of steel grades and insulating materials, all of which are chosen to suit the conditions of the intended track application.

All workshop glued joint kits are based around core design principles providing the optimum strength to the finished assembly.

With a wide range of fasteners available ex stock, kits are typically supplied with multiple groove locking pins and collars or high tensile threaded fasteners based on an assessment of the customer's requirements.

Rapid or slower curing toughened epoxy resin systems are provided in either individual cartridges or bulk packaging complete with suitable metering equipment for accurate mixing and dispensing of the resin.



Dry Insulated Joint Kits

The Coronet Joint

The innovative Coronet Joint has been specially engineered to offer substantial benefits over existing dry-mechanical insulated joint systems.

Through better-engineered fit of components and a unique waveform to the web face of the fishplate the Coronet Joint delivers improved mechanical performance and electrical resistance, even after water immersion.

Manufactured by injection moulding around a precision machined steel core the Coronet Joint achieves tighter dimensional tolerance control than any other dry mechanical insulated joint on the market.

Optimum performance from dry-mechanical joints is achieved when they are installed as a system. This involves accurate cutting/drilling of rails, correct assembly and tightening of the fastenings, followed by periodic inspection of the bolt torque settings. The Coronet Joint is designed for ease of use and rapid on-site assembly.

Available from stock in 4 or 6-hole options to suit CEN56 E1 and CEN60 E2 rail profiles.

Approved by Network Rail the Coronet Joint has been tested to the exacting requirements of Network Rail specification RT/CE/S/023.



Comply Dry Insulated Joint

Comply is a solvent free, epoxy glass crossply weave with a unidirectional configuration.

High mechanical properties result in excellent installed strength. High tensile fasteners with locking nuts are employed in the design along with load spreading steel washer plates. Key features include:

- Lightweight, portable and extremely strong
- Fail safe performance in terms of electrical insulation
- Favoured in light rail applications, due to the lightweight construction and ease of maintenance
- Compares favourably with steel based joints in tensile and shear values.
- Available in most worldwide rail sections

Benefits

- Complete system including fasteners
- Reduced installation time
- High insulation properties
- Extensive fatigue testing conducted
- Fully retractable from rails for access/maintenance



Burns Nylon Insulated Fishplate Kits

LB Foster Rail Technologies is the manufacturer of the Burns Joint kit, also known as 'Burns Treble 6.'

A fully serviceable insulated joint kit utilising replaceable, nylon insulating components. Providing a quick, easy to maintain solution for non-mainline applications.

Burns kits are available to suit UK rail sections 113A, 98lb and 95RBH.

We can supply new complete kits for first time installations or maintenance insulation kits for in situ repair to failed joints.



Service and Support

LB Foster Rail Technologies' dedicated team of rail design engineers is ideally suited to meet the needs of the industry. By focusing on a dedicated range of rail products the service provided to the industry is not hindered by dilution of core activities.

At the heart of LB Foster Rail Technologies is a blend of extensive rail track experience and practical component manufacture.

Key features

- Extensive knowledge of specialist track work design and manufacture
- Vast experience of international railroads, from heavy haul to commuter and transit
- In-house product development and research facility
- Rigorous testing of assembled product
- Multiple rail section availability
- Expansive stock range in core products

For details about LB Foster Rail Technologies' other Track Component products, please visit our website.

For further information on the products and services available from LB Foster Rail Technologies please contact us by telephone, email or our website.

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