

**LB**Foster®

SECTOR

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Rail

AVAILABLE

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Worldwide

**TGA3**

Traction enhancer  
distribution system



# TGA3

## Traction Enhancer Distribution System

**SECTOR**

Rail Infrastructure

**AVAILABLE**

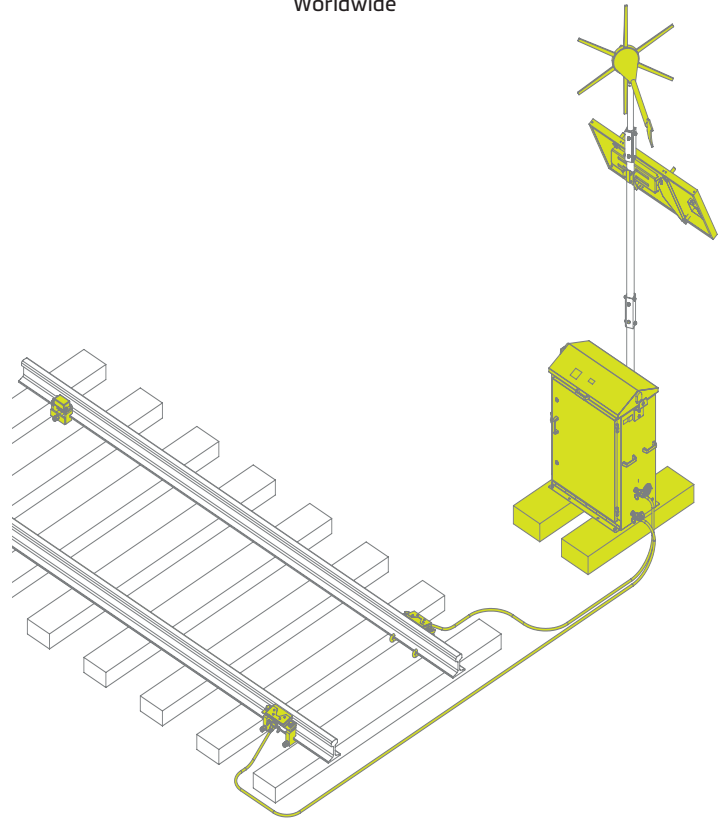
Worldwide

The **TGA3** is designed to dispense traction enhancing materials directly to the top of running rails at locations where there is potential for low adhesion.

Adhesion between vehicle wheels and rails is dictated by top of rail surface conditions / contamination. L.B. Foster have developed the TGA3 to be capable of distributing approved traction enhancing materials directly to the position on the rail where they are required. It is specifically configured to distribute L.B. Foster Traction Enhancer ALLEVIATE™.

The deployment of traction enhancing material can be both a seasonal and all year round requirement. In the autumn, loss of traction emanates from seasonal leaf fall with the leaves covering the running rails creating a slippery surface. Throughout the year there are certain areas of track where traction is an issue; for example, wet rail syndrome or where vehicles have to travel up inclines.

Loss of adhesion results in braking and traction problems, which in turn lead to potential signal failures (loss of track circuit detection), station overruns and insufficient traction on inclines. The result being train delays, operational disruption and wheel damage.



The TGA3 is typically installed at the approach and exit to stations, signals and on track inclines. The TGA3 reliably deploys the required amount of traction enhancing material to the top of rails via application bars.

**FUNCTIONALITY AND APPLICATION**

The traction enhancing material distributed by the TGA3 is picked up by the train wheels and carried along the track, treating both wheels and rail head. Whereas deployment of traction enhancing material from a vehicle mounted application system occurs at set intervals, the TGA3 is able to apply traction enhancing material with every train pass to repeatedly condition critical sections of track.

In addition the TGA3's control system allows the user to adjust the application rates and frequency by setting the number of wheels passing between activations and pump duration.

**KEY BENEFITS**

- > Reduced risk of station overruns and Signals Passed At Danger.
- > Fewer train delays
- > Improved operational reliability
- > Restored traction on inclines
- > Fewer track circuit failures



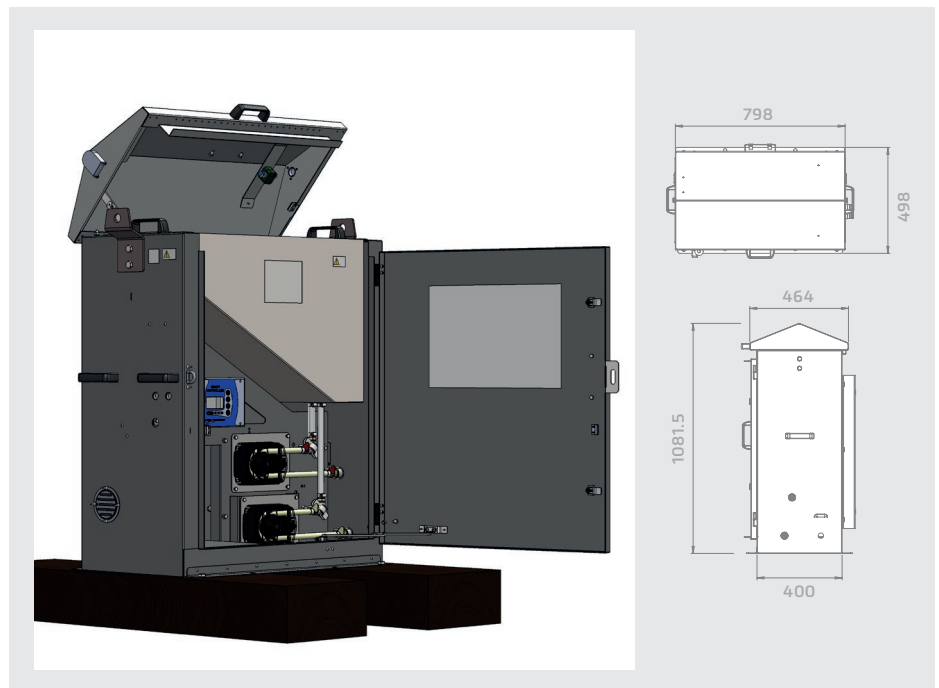
## ADDITIONAL INFORMATION

Remote Performance Monitoring (RPM) is available for the system as an optional extra, providing access to system status through a web-based interface.

Fully Network Rail approved, including for use in DC 3rd rail electrified areas and with all Network Rail accepted materials. Approval number PA-5/02613.

Proven pedigree - TGA equipment has been in service on Network Rail infrastructure since 1998, with approximately 500 TGA systems operational in the field today.

L.B. Foster Rail Technologies offers a full service provision for Traction Gel Applicators that are installed purely to combat the seasonal problem of leaf fall. Typically these units are in service for around 14 weeks per year, L.B. Foster can de-commission units, fully service & store them off site at their own facilities prior to re-commissioning them ahead of the next autumn leaf fall season.



## SYSTEM FEATURES & BENEFITS

- 75 Litre Hopper provides sufficient capacity to enable optimised maintenance/refilling program
- Dual Peristaltic Pump/Motor Assemblies ensure even product distribution to each rail
- Designed for ease of access & maintenance
- Lightweight and Portable allowing ease of installation - Bare cabinet weighs approx 45kg
- Quick Release fastenings simplify the fitting of the track mounted components (spreader bars and wheel sensors)
- Spreader bars specifically designed to distribute traction enhancing materials.
- Protector IV Series control system provides proven reliability
- Power Supply options (DC 12v or AC 115/230v) offer flexibility
- Power options include Solar, solar and wind or mains power (AC 115v/230V or DC12V)
- Low power consumption
- Remote Performance Monitoring (RPM) option to optimise asset management
- Optimised distribution system for deploying the L.B. Foster ALLEVIATE™ traction enhancer



APPROVED FOR USE IN THE TGA3





**LB Foster Rail Technologies**  
**Europe Headquarters**

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Stamford Street  
Sheffield  
S9 2TX

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t +44 (0) 114 256 2225  
e [reply@lbfoster.com](mailto:reply@lbfoster.com)

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[lbfoster.eu](http://lbfoster.eu)