

Tectyl for railways

Protecting Value Through Expertise

Corrosion Protection Solutions for Railway Manufacturing, Maintenance and Asset Lifecycle Extension

The Railway Corrosion Challenge

Railway assets face unique challenges

Environmental Exposure



Rain



Snow



Humidity



Coastal environments



De-icing salts

Mechanical Impact



Ballast strikes

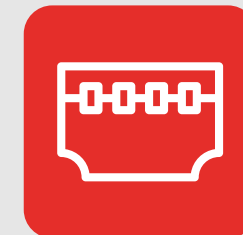


Abrasion



Vibration

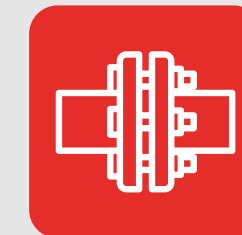
Hidden Corrosion



Weld seams

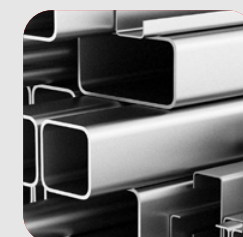


Internal cavities



Overlapping joints

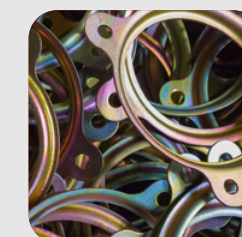
Complex Materials



Steel



Aluminium



Mixed-metal assemblies

Long Service Life

Railway assets are designed for 25–40 years of operation.

Electrical connectors

Roof equipment

Door cavities

Brake systems

Wheelsets

Bogies

Underframe

Hydraulic connections

Battery compartments

Structural cavities

Weld seams

Structural Cavities

Corrosion often begins in areas that are difficult to inspect and expensive to repair.





Storage & Spare Parts Protection



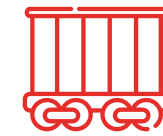
Tectyl 506

Applications

- ▶ Wheelsets
- ▶ Spare parts
- ▶ Bearings
- ▶ Maintenance inventory

Benefit

Temporary corrosion protection during storage.



Transport & Logistics Protection



Tectyl 1079

Applications

- ▶ Chassis
- ▶ Wagon frames
- ▶ Steel structures

Benefit

Protection during transport and export shipment.



Cavity Protection

Advanced



Tectyl 4D750

Applications

- ▶ Bogies
- ▶ Structural tubes
- ▶ Hollow sections
- ▶ Internal cavities

Benefit

Long-term internal corrosion protection. Water-based.

General



Tectyl 210-R

Applications

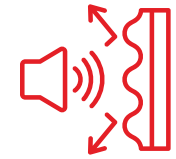
- ▶ Enclosed cavities
- ▶ Internal structural areas
- ▶ Hollow sections
- ▶ Areas requiring cavity wax protection

Benefit

Moisture displacement and electrical corrosion protection.

Protecting both visible and hidden corrosion-prone areas

Tectyl 4D750 → Advanced Cavity Protection
Tectyl 210-R → General Cavity Protection



**Sound
damping**



Tectyl 5638 W

Applications

- ▶ Passenger railcars
- ▶ Body panels
- ▶ Interior structures

Benefit

Noise and vibration reduction.



**Hydraulic system
protection**



Tectyl 5506 W

Applications

- ▶ Hydraulic couplings
- ▶ Hydraulic connectors
- ▶ Mixed-metal interfaces

Benefit

Protection against
galvanic corrosion.



**Electrical system
protection**



Tectyl 3217 E

Applications

- ▶ Electrical connectors
- ▶ Terminal blocks
- ▶ Sensor connections

Benefit

Moisture displacement and
electrical corrosion protection.
Water-based.



**Underbody & Structural
Protection**



Tectyl 5660 W FR

Applications

- ▶ Underbody structures
- ▶ Structural steel
- ▶ Aluminium assemblies

Benefit

Corrosion protection combined
with fire safety requirements.

Tectyl Product	Segment / Product Type	Key Rail Applications	Typical Use Case	Technology / Sustainability angle	Advised Positioning
Tectyl 506	Thin-film / multipurpose corrosion protection – General corrosion preventive	Train wheels, fasteners, clips, spare parts, exposed metal surfaces	Fast protection during maintenance or storage	Solvent-based wax	Use for storage of train wheels and general exposed metal parts.
Tectyl 1079	Transport / chassis protection – Multi purpose protection	Painted or chassis surfaces during transport and storage	Protection of chassis / painted surfaces during transport	Solvent-based wax	Protecting chassis for transport.
Tectyl 210-R	Industrial cavity wax	Enclosed cavities and internal areas where cavity wax is required	Cavity protection; keep positioning simple	Solvent-based wax	Just a cavity wax; avoid overstating severe exposure claims.
Tectyl 4D750	Cavity wax	Bogies, frame tubes, front frame/ crash structures	Cavity protection where humidity and temperature changes are a risk	100% material, solvent-free	Used in bogies and frame tubes; suitable for structural cavities.
Tectyl 5660W FR	Underbody coating	Underbody areas, aluminium and metal parts	Fire-retardant underbody coating; direct-to-metal application	Water-based; fire-retardant; HL3	Can be applied direct to metal; especially useful for aluminium parts without primer.
Tectyl 5638W	Sound damper	Metal surfaces requiring sound damping	Noise and vibration / sound damping coating	Water-based	Water-based sound damping product.
Tectyl 5506W	Protection for hydraulic connections	Hydraulic hose/line connectors, galvanic steel connectors	Corrosion protection for hydraulic system connections	Water-based	For hydraulic hose connections; protects galvanized steel connectors against corrosion.
Tectyl 3217-E	Protection for electrical connections	Electrical connectors and connection areas	Electrically insulating moisture-repellent protection	Water-based	For electrical connections; prevents humidity ingress into connectors, not to be called waterproofing.

Expertise

Decades of corrosion protection experience.

Application Knowledge

Solutions designed for real operating environments.

Lifecycle Protection

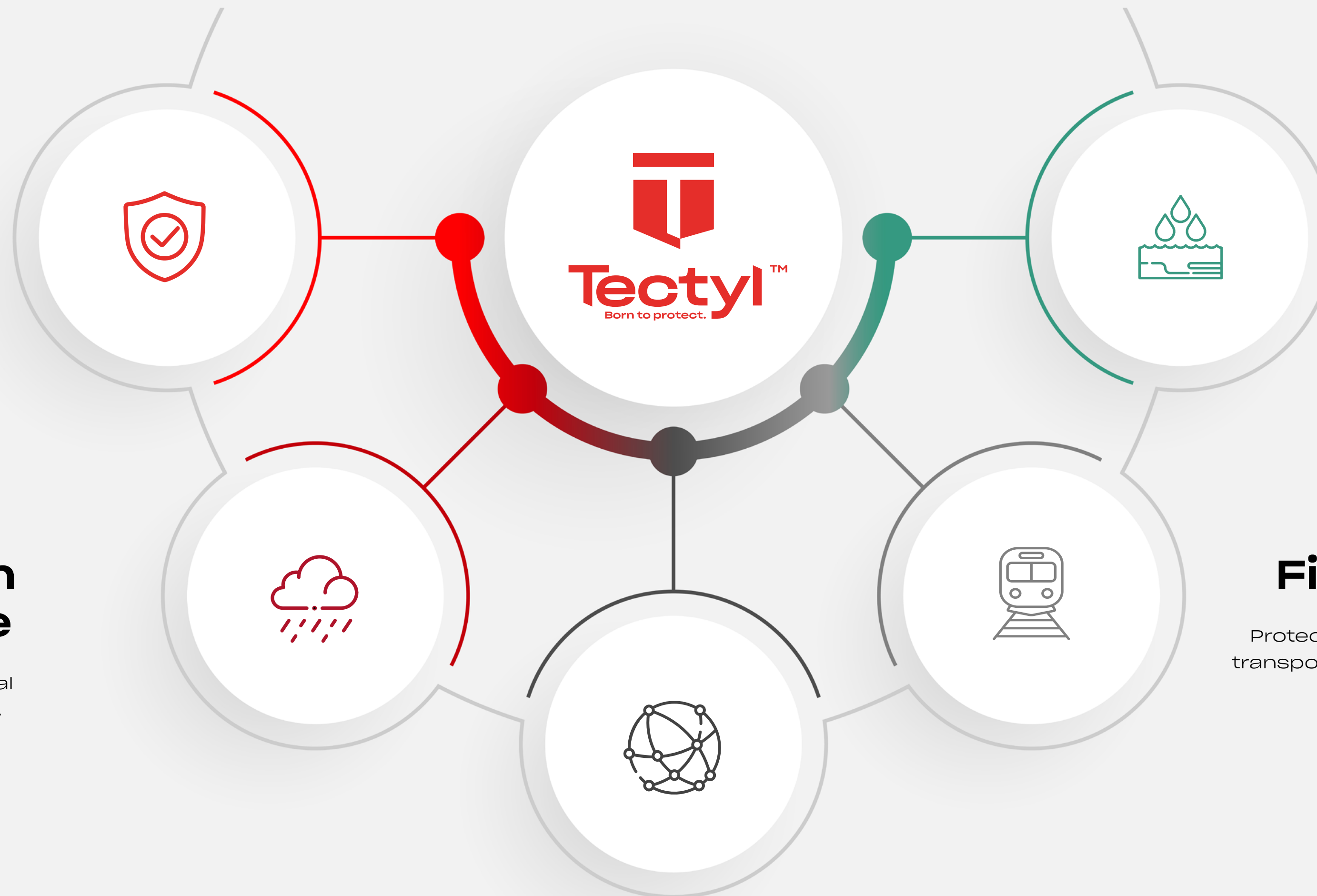
Helping operators reduce maintenance costs and extend asset life.

Final Statement

Protecting railway assets from storage and transportation to operation and maintenance.

Proven Performance

Used across transportation and industrial sectors worldwide.





www.tectyleurope.com



Born to protect. Built to be smart.