PANDROL
Partners in excellence

QTrack®

Sustainable Resilient Systems

Adding Value

The embedded rail system that offers continuous rail support, vibration mitigation and stray current insulation, all integrated in the fastening system.

Pandrol QTrack® is an embedded, ballastless track system that provides vertical and lateral support to the rail.

It reduces vibration transmission from the rolling stock to the surrounding structures, granting control of the electrical flow out of the rails (stray currents).

The system itself provides vertical and lateral support to the rail, while reducing vibration transmission from the rolling stock to the surrounding structures and granting control of the electrical currents flowing out of the rails (known as stray currents).

The rail is continuously supported and fastened by elastic, high-quality, resin-bonded rubber profiles with a unique shape and stiffness characteristics adapted for each project. Pandrol QTrack® can be integrated and designed to match any track finishing.

It can be installed in grooved and vignole rails for a wide range of applications, from tramway to heavy haul projects.

TECHNICAL FEATURES

Noise & vibration attenuation

Pandrol QTrack® can be tuned to attain different stiffness levels in order to meet the required vibration limits.

Electrical insulation / stray current: QT ELEC

To protect against the effect of stray currents, an optional, ad-hoc electrical insulation film is possible, known as QT ELEC. QT ELEC is available in three different levels of isolation: ELEC-L, ELEC-H and ELEC-M.

Designed for quick installation

Pandrol QTrack® utilises a top-down installation method and can be installed at a rate of up to 144 linear meters of single track per team and per day.

Encapsulation of switches and crossings

The system is fully developed to provide full encapsulation of switches and crossings. Tailor-made pieces along with a customised layout drawing are delivered for encapsulation of the turnouts on site.

Integration in Prefab panels

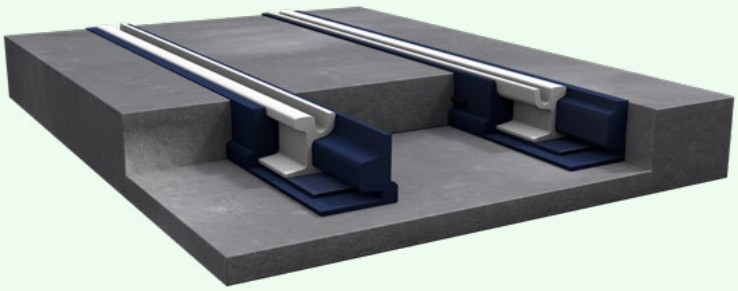
QTrack® system can also be designed and integrated in pre-fabricated concrete beams or slabs for a quick installation in projects that require a minimum traffic disruption.

Sustainability & very low carbon footprint

Rubber QT encapsulations are made of more than 90% of recycled materials and are 100% recyclable, contributing to the circular economy and help improving environmental conditions.

ADVANTAGES

- Pandrol QTrack® is the quickest, easiest to install embedded rail system on the market. This ease of installation saves time and manpower costs.
- Vibration isolation and stray current protection are provided within the same system.
- Even distribution of loads lowers vibration emissions and increases the track quality.
- The homogeneous stiffness of the track controls rail corrugation and results in less grinding activity. This reduces maintenance and increases track longevity. Pandrol QTrack® has one of the lowest lifecycle costs of systems on the market.
- The ability to adjust stiffness levels to achieve specific attenuation levels makes Pandrol QTrack® a flexible, versatile option.



COMPONENTS

1. Rail fastening system: sleepers and/or baseplates
2. Plastic protecting cover
3. Rubber FT ENCAPSULATION
4. Top sealing joint (optional)

SPECIFICATIONS

Technical specifications	
Materials	High-density recycled rubber bonded with high-performance resin
Setup	Fastening embedded track system with encapsulation profiles adapted to rail geometry for Top-Down installation method
Density	1000 kg/m³
Supply	Profiles adapted to rail geometry. Ancillary tool for Top-Down installation: • Glue • QT-Jig´s

PROFILES

Different types of QTrack® are possible to meet customer and project requirements.

QTrack® SP
for Vignole rail

QTrack® HP
for Vignole rail

QTrack® XP
for Vignole rail

QTrack® SP
for Grooved rail

QTrack® HP
for Grooved rail

QTrack® XP
for Grooved rail

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