



**GANTREX**<sup>®</sup>  
ON TRACK. WITH YOU.

# TrenchLok<sup>™</sup>

## Cable Protection System



Gantrex' cable protection system TrenchLok<sup>™</sup>, efficiently and economically protects cranes' power cables from damages and problems caused by crossing vehicular traffic in ports and steel mills.

When the crane travels, power cables unwind from cable reels and are laid down in a trench. The TrenchLok<sup>™</sup> system consists of a continuous semi-flexible belt, made of a steel reinforced rubber, which lies over a corrosion-resistant steel channel cast in the quay. The belt is fixed to the quay surface along one edge, while the other remains free to be lifted in vertical position by a belt lifting device fitted to the crane. The belt returns to its closed position as soon as the crane has passed.

## Protection first

The TrenchLok<sup>™</sup> system provides protection for the cable, from passing vehicles and pedestrians.

The cables are protected against impacts of crossing vehicles, but also sheltered against debris entering the trench and adverse weather conditions.

It also eliminates tripping hazards for pedestrians.

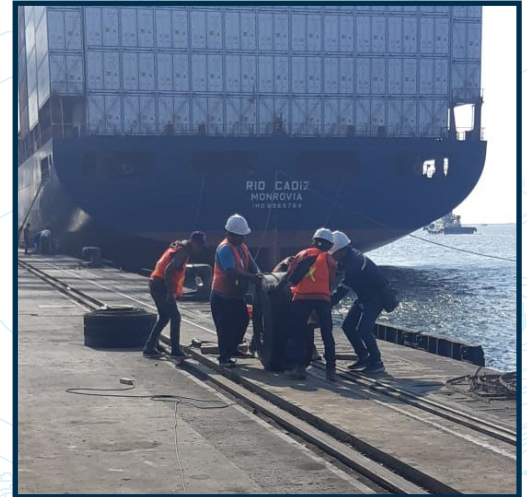
Gantrex offices, staffed with qualified and trained technical personnel, are located on all continents and available to provide local application support and service in all industries and applications, to be **ON TRACK. WITH YOU.**



## Key features

The TrenchLok™ system provides an ideal cover to operate in all types of facilities seeking cable protection from rubber-tired vehicles and pedestrians. This system boasts many advantages:

- Maintenance free;
- Easy to install;
- Suitable for most all container handling vehicle traffic
- Full operational security;
- Free of alignment problems;
- Free of crane speed limitations;
- Easily adaptable to the system in place.



## General characteristics

The Gantrex' cable protection systems are supplied in two different designs:

- **TrenchLok™**
- **TrenchLok™HD**

The standard TrenchLok™ is designed for light vehicles and pedestrian traffic. Alternatively, TrenchLok™HD allows heavy vehicles traffic and their operations over the belt.

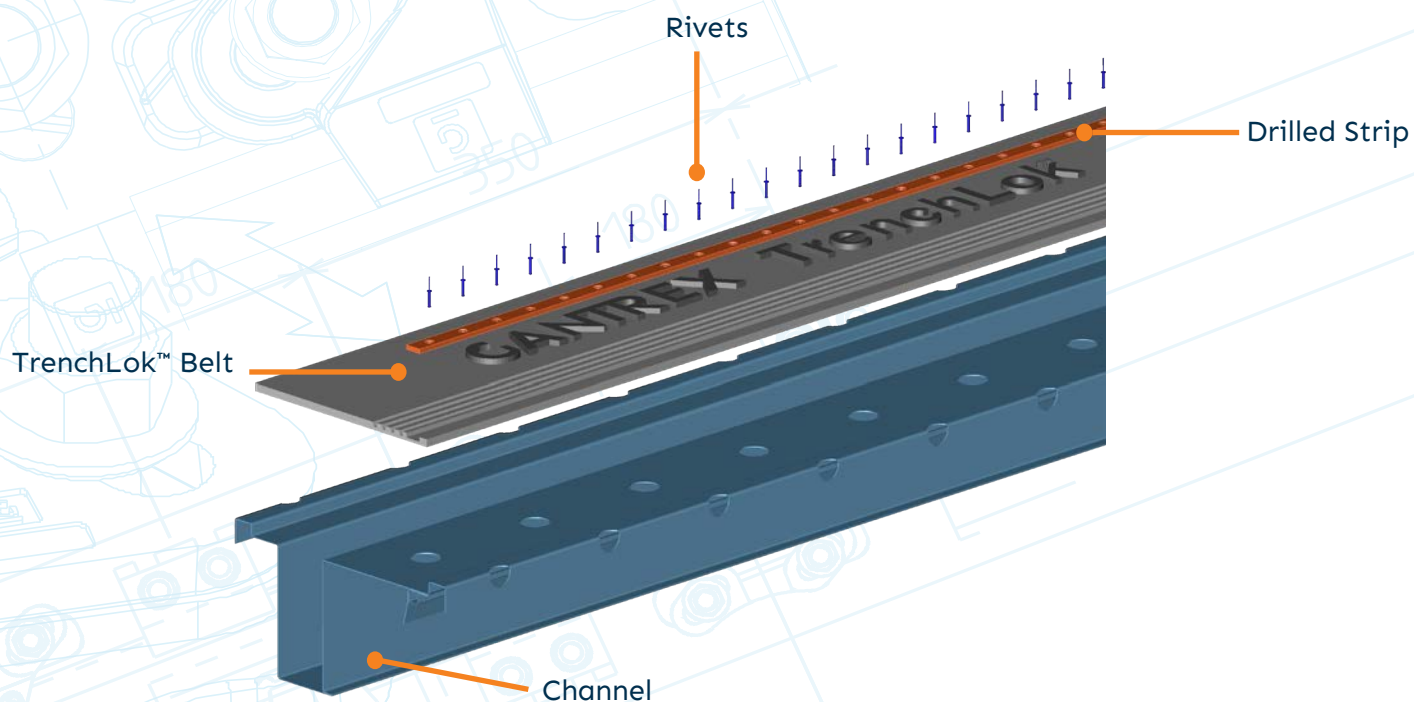
The belt is engineered with high transversal rigidity to support all types of pneumatic-tired vehicles passing over, but it must also possess sufficient longitudinal flexibility to allow the belt to be lifted into the vertical position.

The belt surface is specifically designed to avoid wear and tear of crossing rubber-tired vehicles.

The TrenchLok™ belts, both standard and HD, are delivered in rolls of 50 meters.

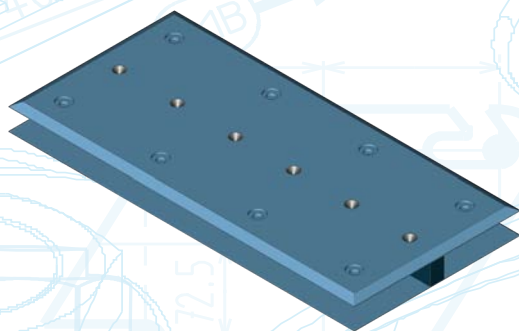


## Components



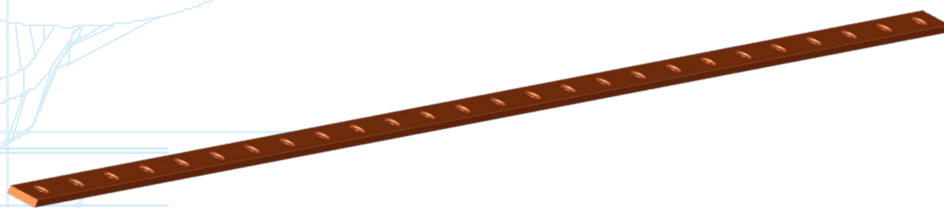
### Belt joint

To form a continuous belt along the trench, the belt unit lengths can be joined, by mechanical fastening. This is a resistant joint, fast and easy to install, which requires very little means to carry it out.



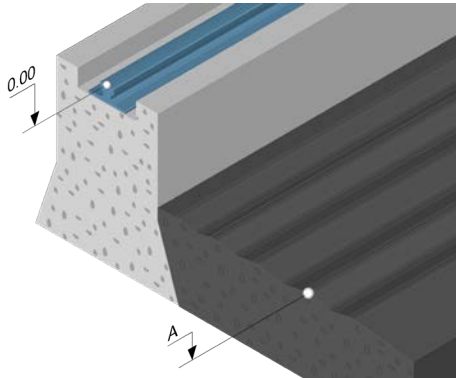
### Fixing strip

The TrenchLok™ fixing system is implemented through a 30mm corrosion-resistant steel plate. This plate fixes the belt to the metallic channel cast in the quay.



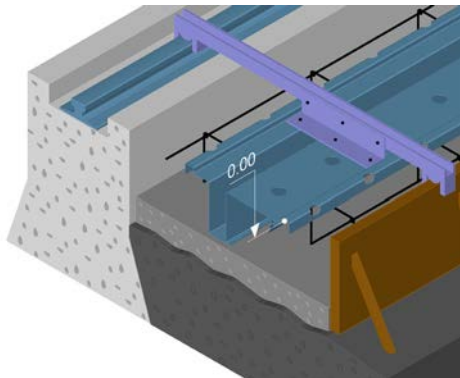
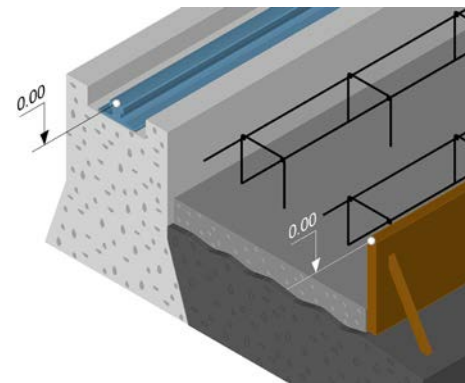
# Installation

**Basic Materials Receipt:** The channel will ship in pieces, mounted following the agreed design, plus belt fixing strip and rivets. The channel slot may be stuffed with Styrofoam to maintain shape during concrete placement. The belt will ship in Rolls (standard length: 50 m/roll).



**1 - Wharf Preparation:** Block out the TrenchLok™ placement area in the wharf prior to concrete pour. Dimension A should be at least 100mm greater than channel depth

**2 - Placement Area:** Place and align concrete reinforcement per Civil Works drawings, and position retaining wall. Align the TrenchLok™ channel with top of rail elevations



**3 - Channel Placement:** hang and align the channel with regards to crane rail elevation. Interconnect the channel sections. Brace channel against movement from hydraulic pressure of concrete flow.

**4 - Concrete Placement & Channel Casting:** Place concrete to permanently cast channel in wharf. Remove Styrofoam after concrete has set.

**5 - Belt Placement:** Roll-out and place belt on channel using tension methods provided in detailed instructions. Attach belt to channel using fixing strips and rivets.

