

# Mosdorfer Rail Ltd

## New-Generation Tensorex C+ 3D

### Patented Spring Tensioning Device



In the ever-evolving world of railway technology, where the need for efficiency, safety and precision grows by the day, railways are constantly faced with challenges.

One of the biggest hurdles is ensuring that the tensioning systems along the tracks can keep up with the demands of longer stretches and more intricate rail lines.

For many years, the Tensorex C+ system has been the go-to solution. Designed to replace the older balance weight systems, it brings a new level of reliability to both railways and trams, making it a staple in the

industry. The Tensorex C+ handles tension lengths up to 1,116 meters. For many rail lines that stretch far beyond that, the solution just isn't enough. The question is, what happens when the track stretches further than the original Tensorex C+ system can go?

As the Tensorex C+ nears 20 years of operational reliability and low maintenance, the need for tensioning units that can maintain longer tensioning lengths grows even more. The answer comes in the form of the Tensorex C+ 3D. The new system extends the maximum tension length to 1,616 meters, adding a full 405 meters to the original capacity. This enhanced version delivers a remarkable increase in force and compensation capabilities, resulting in up to a 40% increase in

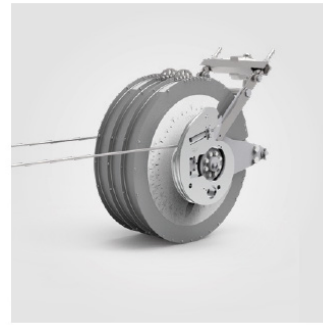
tension length. This makes it a genuine alternative to traditional balance weight systems, providing enhanced performance and versatility for a wide range of railway applications.

With these advancements, our device now stands as a true alternative to traditional balance weight systems, further cementing its position as a world leader in railway technology. Our commitment to innovation and performance continues to drive us as we aim to meet the ever-evolving needs of railway applications worldwide, offering cutting-edge solutions that elevate the industry's standards.

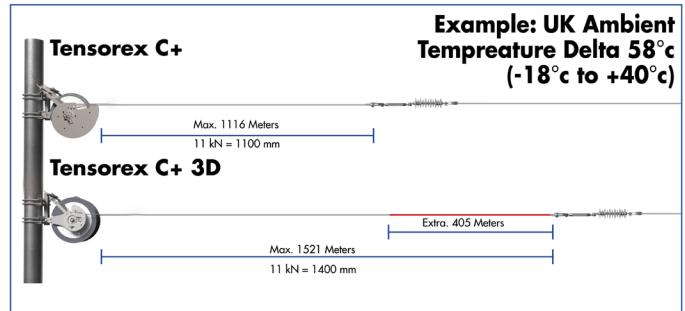
The new improved variant of the Tensorex C+ product achieves its enhanced capabilities through innovative optimisation of the spiral springs and pulleys, resulting in increased torsional performance. This advancement is accomplished while preserving the robust mechanical principles that have reliably supported the product for over 20 years in the railway industry.

This new model incorporates our proven higher torque springs, which have demonstrated reliability in our high-tension models, such as the 4SS and 5SL. Additionally, it features a groundbreaking 3-dimensional pulley design that maintains applied torque through more than 360 degrees of movement.

The new 3D product has undergone rigorous independent testing to ensure compliance with both internal and external standards. These tests predict that the endurance of the product will reach the design life of a typical overhead line equipment system. Another key aspect of this product improvement is that 95% of the components in the new Tensorex C+ 3D have a proven track record from our existing range, ensuring reliability and quality. By innovatively



Electricification



optimising just a few components, we have achieved significant performance enhancements without compromising on the standards that our customers expect.

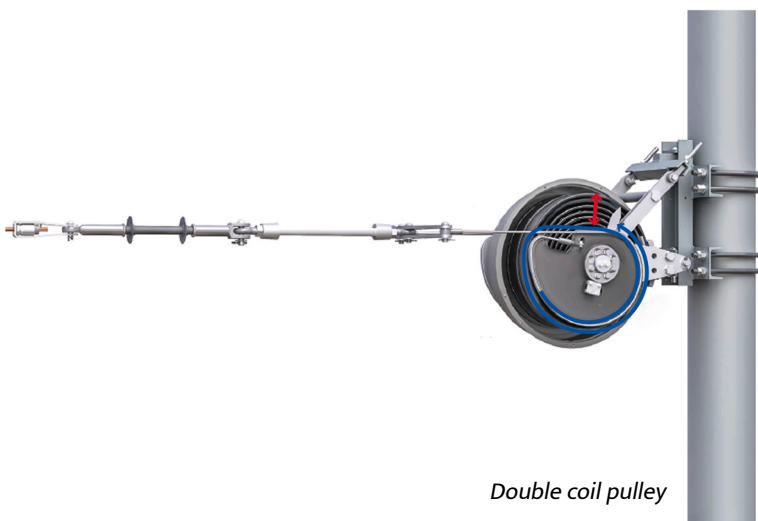
This commitment to durability and performance positions the Tensorex C+ 3D as a dependable choice for railway applications, reinforcing our reputation for quality in the industry.

### Benefits:

In addition to the enhanced performance of the Tensorex C+ 3D, the product offers several key benefits over traditional auto-tension systems:

- Increased levels of product safety
- Higher reliability
- Extremely low maintenance
- More compact and aesthetically pleasing design
- Reduced installation costs
- Virtually immune to vandalism
- Lower life cycle costs
- Proven supply and reliability

These advantages make the Tensorex C+ 3D a spring tension device with unparalleled performance and capability, meeting the demands of modern railway systems. With the availability of this training course, options are now available for extended product warranties on Tensorex C+ units installed by trained personnel. Please contact Mosdorfer Rail Ltd for more information.





Tensorex C+ safety training

## Safety Training: In Partnership with Akona

Mosdorfer Rail recently developed a new training course in the installation and maintenance of our Tensorex C+ spring-tensioning system.

It is the only Tensorex C+ training endorsed by Mosdorfer Rail; the designer, manufacturer and patent holder of the product. The course is designed to provide a blended learning programme that addresses the key fundamental technical and functional aspects of the Tensorex C+ system.

This course is directed towards competent staff that undertake installation or maintenance railway engineering activities. The course syllabus aims to raise individual standards and awareness of methodologies around the Tensorex C+ system. This includes the installation process, the setting up and the maintenance of the auto-tensioning system. Learners that successfully complete the course will

be awarded a bespoke customised Level 2 award in the Installation and Maintenance of the Tensorex C+ System. This qualification is issued by ETA, a nationally recognised educational awarding body which quality-assures this training product.

The issuing of this Level 2 award will in turn register the individual onto a tracking matrix of the competency award. This concept approach will provide the principal provider with the following assurances:

All Tensorex C+ trained and qualified installers/maintainers will be placed on a database for internal and external purposes.

- The issued certificate provides a barcode for scanning of trained and qualified staff
- All staff reporting to worksites can be verified prior to work commencing
- Installation activities will be recorded and documented using the issued ITP form
- Standards around the installation will be raised and more accountabilities can be placed on OLE installers

This training course is available now and can be organised via the team at **Mosdorfer Rail Ltd**. With the availability of this training course, options are now available for extended product warranties on Tensorex C+ units installed by trained personnel.

Please contact **Mosdorfer Rail Ltd** for more information.



Installation on Sheffield tram 2024

