CORDSTRAP RE-TENSIONABLE LASHING SOLUTION

replaces traditional steel chains, 10 ton ratchet and wire ropes with a safer, more efficient solution

the challenge

Securing heavy and irregular cargo for transport has long relied on steel chains, 10 ton ratchet and wire ropes—methods that pose significant safety risks. These traditional systems demand high manual effort, expose operators to pinch points, and often lack consistent pre tensioning, increasing the likelihood of load shifts during transit. Inadequate tension control can lead to catastrophic cargo movement, endangering personnel, damaging goods, and causing severe financial and reputational losses.

The challenge is amplified in industries where compliance with international cargo securing standards is mandatory. Operators face pressure to balance speed, cost, and safety, yet existing solutions often compromise one for the other. Frequent injuries from handling heavy chains, coupled with time-consuming application processes, highlight the urgent need for innovation.

The Re-tensionable Lashing Solution addresses this critical gap by introducing a lightweight, ergonomic, and adjustable system that delivers superior pre-tensioning without excessive effort through the use of the Cordstrap battery tooling (CBT). By reducing physical strain and eliminating common failure points, it significantly lowers the risk of accidents while ensuring full compliance with global safety standards. This innovation transforms cargo securing from a high-risk task into a controlled, efficient, and safe process—protecting workers, cargo, and the supply chain.

the innovation

The Re-tensionable Lashing Solution is a breakthrough in cargo securing technology designed to replace traditional steel chains, 10 ton ratchet and wire ropes with a safer, more efficient solution. The system combines a high-strength textile lashing with a re tensionable element and a battery powered tensioner, enabling precise and repeatable pre-tensioning without excessive manual force. This innovation delivers the strength and reliability of conventional methods while dramatically reducing operator risk and physical strain.

Unlike fixed-length chains, the Re-tensionable Lashing Solution can be used with an endless lashing length, offering flexibility to secure a wide range of cargo types and sizes with minimal effort. Its lightweight design improves ergonomics, reducing handling injuries and fatigue, while the re-tensionable mechanism ensures consistent tension for maximum load stability during sea transport if necessary. The system is fully compliant with international cargo securing standards, making it suitable for global supply chains across industries such as steel, and heavy machinery & equipment manufacturing.

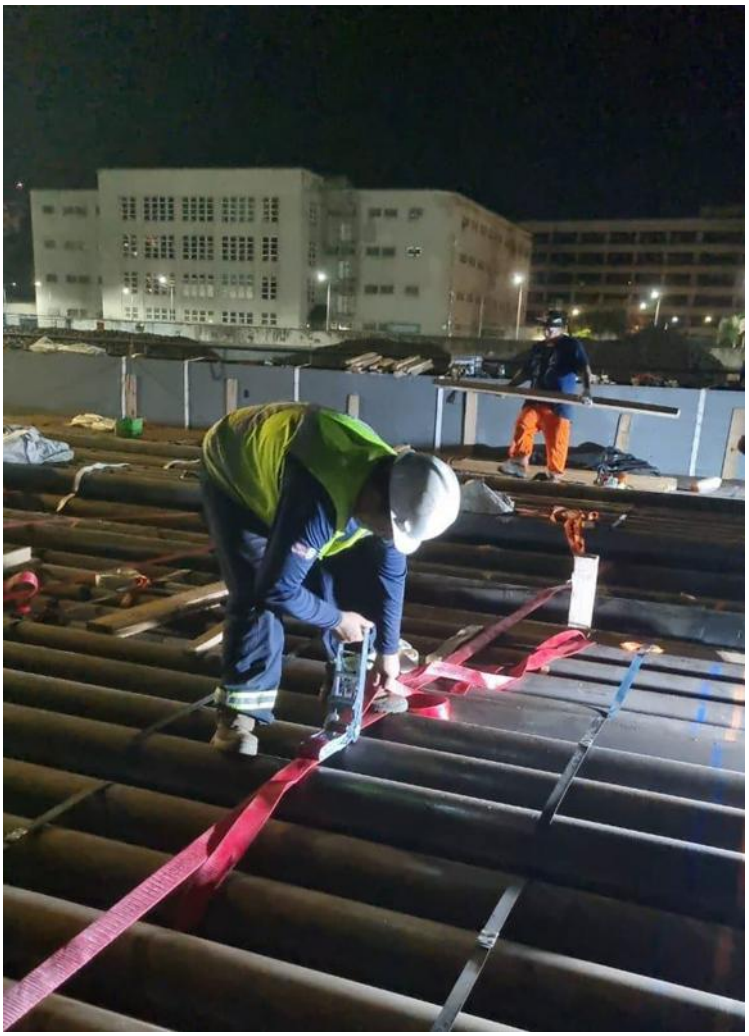
By combining safety, speed, and simplicity, the Re-tensionable Lashing Solution transforms cargo securing from a labour-intensive, high-risk process into a controlled, efficient operation. It not only enhances worker safety but also improves operational productivity and reduces downtime—delivering measurable value to both logistics providers and their customers.

how it was implemented

The Re-tensionable Lashing Solution was implemented through controlled field trials with logistics partners handling heavy and irregular cargo. Initial deployment involved replacing steel chains and wire ropes in real transport scenarios to validate performance under operational stress. Operators were trained on-site to apply the system correctly, ensuring safe pre-tensioning (using a battery powered handheld tool) and proper anchoring.

The trials were conducted across multiple environments—steel pipes, and machinery—where securing reliability is critical. Each test measured tension consistency, application time, and operator feedback. Results confirmed that the Re-tensionable Lashing Solution reduced manual effort significantly while maintaining or exceeding required securing standards.

Following successful trials, continuous monitoring included load inspections after transit and feedback sessions with crews to identify any adjustments needed. The lightweight design and re-tensionable mechanism proved intuitive, reducing fatigue and improving safety compliance without disrupting workflow.



This hands-on, iterative approach ensured that the Re-tensionable Lashing Solution was not just a theoretical improvement but a practical, field-ready solution delivering measurable safety benefits in real-world conditions.

what was the result

Field implementation of the Re-tensionable Lashing Solution delivered measurable improvements in safety and efficiency. Across multiple trial sites—steel, and machinery transport—the system consistently achieved secure pre-tensioning without excessive manual force, reducing operator strain and lowering the risk of injury, thanks to combining it with a battery operated tool.

Application time decreased by up to 40% compared to steel chains, enabling faster loading and turnaround without compromising compliance. Operators reported significantly improved ergonomics, with the lightweight design reducing fatigue during repetitive securing tasks. Post-transport inspections confirmed zero load shifts in all trial shipments, validating the system's reliability under real-world conditions.

Safety compliance was enhanced through consistent tensioning and simplified handling, eliminating common failure points associated with traditional methods. Feedback from crews

highlighted increased confidence in securing processes and reduced physical stress, contributing to a safer working environment.

These results demonstrate that the Re-tensionable Lashing Solution is not only a technical innovation but a patented, practical solution delivering tangible benefits: improved operator safety, reduced application time, and reliable cargo stability—setting a new benchmark for secure, efficient transport.

A quote from one of our steel customers, Vallourec, in Brazil: “The Re-tensionable Lashing Solution offers extended lashing capacity and superior pre-tensioning compared to standard systems, providing secure and consistent fastening, optimizing operational efficiency with the aim of reducing human error and protecting the integrity of the load. It was very satisfactory.”.

conclusion

As a patented solution, the Re-tensionable Lashing Solution sets a new benchmark for safe, efficient cargo securing. By replacing heavy, injury-prone chains and wire ropes with a lightweight, ergonomic system, it addresses one of the most persistent risks in logistics: operator strain and inconsistent tensioning. Field implementation has proven that this solution not only meets but exceeds international safety standards, delivering reliable load stability while reducing physical effort and improving compliance.

The innovation is simple yet transformative—combining proven ratchet technology, high quality lashings, the benefits of a specific buckle integrated in the solution and using a battery powered tensioner to create a system that is intuitive for operators and adaptable to diverse cargo types. Its ability to be used with an endless lashing length ensures flexibility without compromising safety or efficiency.

The Re-tensionable Lashing Solution demonstrates that safety and productivity can go hand in hand. It empowers logistics teams to secure loads faster, safer, and with greater confidence, ultimately reducing accidents and protecting both people and cargo. This award would recognize a practical innovation that is already making a measurable difference in the field and has the potential to set a new standard for safe cargo securing worldwide.

LINK: https://www.cordstrap.com/en/

cordstrap
The Passion to Protect

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