

ShoreTension



Safe, stable and sustainable mooring of seagoing vessels

ShoreTension is a revolutionary system that prevents the breaking away of seagoing vessels from their moorings and ensures a more stable position in high winds and/or swell. Because ShoreTension is better able to hold ships in a stable position than their own mooring systems, it ensures higher productivity and less downtime of the terminal. Furthermore, important cargo handling equipment, such as (container) cranes, deep loaders and manifolds, is better protected.

WHY SHORETENSION?

On 18 January 2007, the mooring lines of a container ship broke in Rotterdam during a storm. The ship drifted off and rammed a jetty of an oil terminal, destroying it, resulting in oil leakage into the water.

This accident was cause for the Royal Boatmen Association Eendracht (Koninklijke Roeiers Vereniging Eendracht, KRVE) to go searching for a safer and more sustainable way to moor and secure ships: ShoreTension is the result.

HOW DOES SHORETENSION WORK?

The system consists of three components:

- A hydraulic cylinder, located on the quay, which automatically keeps the mooring lines under tension if wind and wave conditions alter.
- A high-quality high molecular polyethylene (HMPE) mooring

hawser with a minimum breaking load of 200 tonnes. This line runs from the quay, through the ShoreTension system, to the ship in question and subsequently attached to the ship's bollards.

- A module which makes it possible to monitor ShoreTension by means of a web application. If the limit values are exceeded, a text message is automatically sent.

THE ADVANTAGES OF SHORETENSION

- ShoreTension is strong. With an adjustable strength up to 60 tonnes, compared to the strength of an average ship winch of 15 tonnes, means that ShoreTension is stronger and more reliable than regular mooring systems. Checks of the high quality HMPE lines are carried out regularly.
- ShoreTension responds automatically to the ship's movements, something ship winches are not always able to do. A ship winch which is in 'tension mode' does not respond proactively

enough and is not strong enough to cope with extreme conditions.

- Once tensioned, ShoreTension does not consume energy.
- Unlike any other mooring method, ShoreTension is a mobile system which can easily be moved for use elsewhere.
- If ShoreTension is used, it is not necessary to call for tugboat assistance to keep the vessel alongside the ship during high winds to prevent it from breaking loose.
- ShoreTension responds to conditions proactively, keeping the lines under tension. This means crews need less time to adjust the mooring lines of the ship.
- ShoreTension is the only mooring system that is fully certified.
- ShoreTension prevents mooring lines from breaking, which increases the safety.
- ShoreTension prevents damage to loading equipment because ships are moored more stable.

THE ROLE OF THE PORT OF ROTTERDAM

The Port of Rotterdam, in cooperation with various partners, has the ambition to continually improve the port and, thus, to be the safest, most efficient and most sustainable port in the world. The ShoreTension system, which was developed by the KRVE, emphasizes this and demonstrates the Port of Rotterdam's entrepreneurship and capacity for innovation. Rotterdam will be the first world port at which ShoreTension is broadly available.

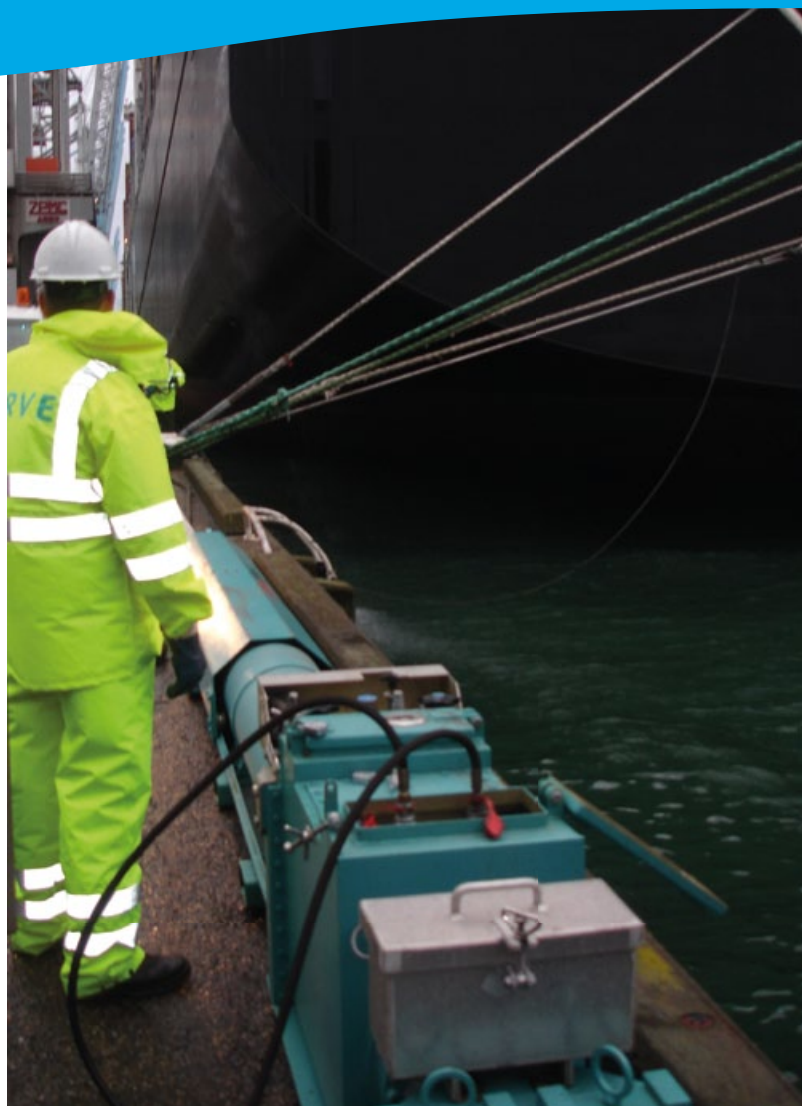
The Port of Rotterdam Authority is supporting the broad roll-out of the ShoreTension system in the port by providing a sponsor amount of €300,000. The Port of Rotterdam Authority wants to encourage terminal operators to make their activities safer, faster and more sustainable by using ShoreTension.

DISCOUNT

The Port of Rotterdam Authority is giving a discount to terminal operators who wish to purchase ShoreTension by reimbursing a maximum of 10% of the price of each ShoreTension system purchased.

WOULD YOU LIKE TO KNOW MORE?

Go to www.portofrotterdam.com/shoretension for the General Conditions and fill in the contact form.



PORT OF ROTTERDAM AUTHORITY

The aim of the Port of Rotterdam Authority is to enhance the port of Rotterdam's competitive position as a logistics hub and world-class industrial complex. Not only in terms of size, but also quality. The core tasks of the Port Authority are to develop, manage and run the port in a sustainable way and to maintain a speedy and safe service for shipping.

FOR MORE INFORMATION, PLEASE CONTACT

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