*ShoreTension® is a system for safer mooring of sea-going ships that is as convenient as it is revolutionary. ShoreTension®, a cylindrical device, can be flexibly used in any port at terminals where containers, general cargo and/or bulk are handled.*

RAK Ports has organised ShoreTension Units for your visit to Saqr Port

With ShoreTension Mooring System, vessels can be firmly secured to the quay reducing the movement caused by surge, strong winds, swell or passing ships. The ShoreTension equipment has been certified by Lloyds Register of London with a safe working load (SWL) of 60 tonnes.
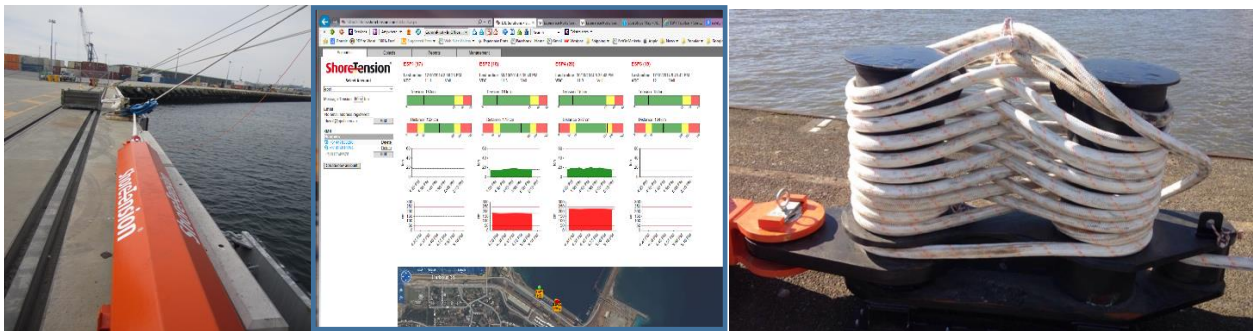
The ShoreTension unit and block is secured on the quay between two bollards using strops. The Dyneema working line is connected to the ShoreTension unit (moving end) and the slack is taken up on-board using the strongest vessels mooring bits, to secure the ST mooring line. Preferably a Panama (round) fairlead is used.

Please ensure that the sleeves of the ST mooring line are positioned in the vessel's fairlead and around the vessel's bollard.

ShoreTension is only activated once the line is secured to the vessel's bits and the safe working load is set (taking into account the Safe Working Load factors of the vessel's bits, fairleads and quay bollards).

The ShoreTension mooring system uses stored energy to keep the required tension on the Dyneema mooring line and only uses pressure when required to keep the vessel alongside the quay up to the set safe working limit.

What this means for the Vessel:
The units take a duration of roughly 20 minutes to position and setup. This will take place on the quay once your conventual mooring lines has been completed and secured.

The ShoreTension units preferably require the centreline Panama fairlead to be free for the Shore Tension breast lines and a fairlead forward and aft to be free for the Shore Tension spring lines. All depending on the designed mooring arrangement.

After the units have been fitted, the maximum allowable force on the hydraulic system will be set according to the safe working load of the vessel's bits, fairleads and quay bollards. The units will be remotely monitored by the Ports; however, it is important that the vessels crew regularly monitor and maintain the vessel's conventional mooring lines. Only then all mooring lines can work together.

Utilisation of ShoreTension Mooring System in Saqr Port Deep-Water Bulk Terminal (DWBT)
RAK Ports deploys the ShoreTension Mooring System as a control measure to prevent vessels in the DWBT, from breaking away from berth during an adverse weather event. While the units may be deployed during a gale / severe weather warning at any time during the year, the primary use of the units is intended during the period October to May.

Upon arrival, and after the vessel has been moored using its own mooring lines, the ShoreTension Mooring System can be deployed in accordance with the Movement Schedule. The ShoreTension Mooring System (depending upon a vessel's configuration) comprises two breast lines (one forward and one aft) and either two spring lines (one forward and one aft) or one headline plus one stern line – this may be varied according to conditions and available bollards.

For the safe and efficient installation of the ShoreTension Mooring System, the vessel's crew must assist the Mooring Gang in taking-up the ShoreTension mooring lines and making the lines fast on board.

The main requirements for use of the ShoreTension Mooring System are:
- The ShoreTension mooring lines should be lead through Panama fairleads and be the only lines passing through those fairleads.
- A suitable bitt on board the vessel must be kept clear for making fast each ShoreTension mooring line.
- Drum-ends must be available to heave-up the ShoreTension mooring lines from ashore.
- The protective red sleeves for the ShoreTension mooring lines should be positioned as instructed by the Mooring Gang.
- Complete the "*Confirmation to Use ShoreTension System in RAK Ports*"

Any concerns regarding the ShoreTension Mooring System should be reported immediately to the Saqr Port's Shore-bosun on phone: +971 (0)50 487 8458 or, Saqr Port Control on VHF Ch. 14 or via email at spatower@rakports.ae

Vessel Masters are encouraged to forward their queries and comments regarding the efficiency of the ShoreTension Mooring System to the Group Harbour Master via email at mmagee@rakports.ae

Note:

1. Vessels will need to supply a mooring team of three (3) for securing each ShoreTension line onboard. If two units are to be fitted simultaneously then six (6) will need to be provided.

2. The crew must advise the Mooring Gang of the safe working load of the bitts/fairlead for each ShoreTension mooring line; this will allow the Mooring Gang to adjust the mooring dampers according to the bitts/fairlead safe working load.

3. The units will be remotely monitored by Saqr Port Control Tower.

4. It is important that the vessel's crew regularly monitor the ships bitts and fairlead for signs of damage and keep the vessels lines taut.

5. The ShoreTension Mooring System is a supplementary mooring; the vessel's own moorings are always the primary means of securing the vessel alongside. Furthermore, it is essential that the vessel's moorings must be tended throughout the time alongside, considering, prevailing sea state and weather conditions. The Master remains responsible for ensuring that the vessel is always moored safely and properly.

More details including videos and pictures on the operation of ShoreTension can be found at https://shoretension.com/

- Applicable to vessels intending to utilise ShoreTension Moring System in RAK Ports.
- To be completed by the Master/Chief Officer of the Vessel.
- The completed form should be handed to Mooring Gang prior to the deployment of ShoreTension System.

Vessel Details			
Name of the Vessel			
Berth to		IMO Number	
LOA		Beam	
Arrival Draft	FWD:	AFT:	

General Mooring Arrangements		
Mooring Lines used	**Headlines:**	**Stern-lines:**
	Fwd breast-lines:	**Aft breast-lines:**
	Springs Fwd:	**Springs Aft:**
Mooring Layout		

Safe Working Load (SWL)* of Mooring Equipment		
Bow	Bitts:	Fairlead:
Stern	Bitts:	Fairlead:
Special Information (if any)		

Confirmation Checklist	
☐	I, have read the ShoreTenson Information Sheet (supplied alongwith this form) and understood the purpose and functionality of the system.
☐	I confirm and accept the readiness of my vessel to utilise the system to ensure the effectiveness of moorings of my vessel whilst alongside the berth.
☐	I confirm that I will brief about the usage of the ShoreTension to my crew and will coordinate the supply of sufficient number of vessel's mooring team for securing each ShoreTension line onboard.
☐	I confirm that vessel's crew will provide support to Mooring Gang until ship lines are tensioned correctly.
☐	I confirm that the vessel's crew will regularly monitor the ship's bitts and fairlead for signs of damage and keep the vessel's lines taunt.
☐	I understand that ShoreTension Mooring System is a supplementary mooring; the vessel's own moorings are always the primary means of securing the vessel alongside.
☐	I confirm that vessel's moorings will be tended throughout the time alongside, considering, prevailing sea state and weather conditions.
☐	Vessel's crew will endeavour to ensure that mooring lines are kept equally tensioned at times and all efforts will be taken to minimise rolling motion.
☐	I agree to be contacted by the Mooring Gang / Port Control to provide further information if necessary.

Name and Signature	Master/Chief Officer:

* ShoreTension is only activated once the line is secured to the bitts and the safe working load is set (taking into account the ship's bitts, fairleads, bollards and ShoreTension equipment). The ShoreTension mooring system uses stored energy to keep the required tension on the Dyneema® line and only uses pressure when required to keep the ship alongside the quay up to the set safe working limit.