



# MAXIMUS<sup>®</sup>

**BEXCO**

OUR ROPE, YOUR SOLUTION

# MAXIMUS®

## Meeting the needs of ship owners and operators, today and tomorrow.

The trend towards ever-larger vessels has dominated the industry over the last decade, with the world's leading carriers aiming for economies of scale to remain competitive and efficient, whilst retaining high standards of safety, reliability and service.

In consultation with its longstanding clients in the shipping industry, BEXCO has developed a unique, purpose-built mooring solution, which satisfies the criteria demanded by owners and operators of these ultra-large vessels in terms of efficiency, ease of use, and economies achieved over the lifetime of the rope.

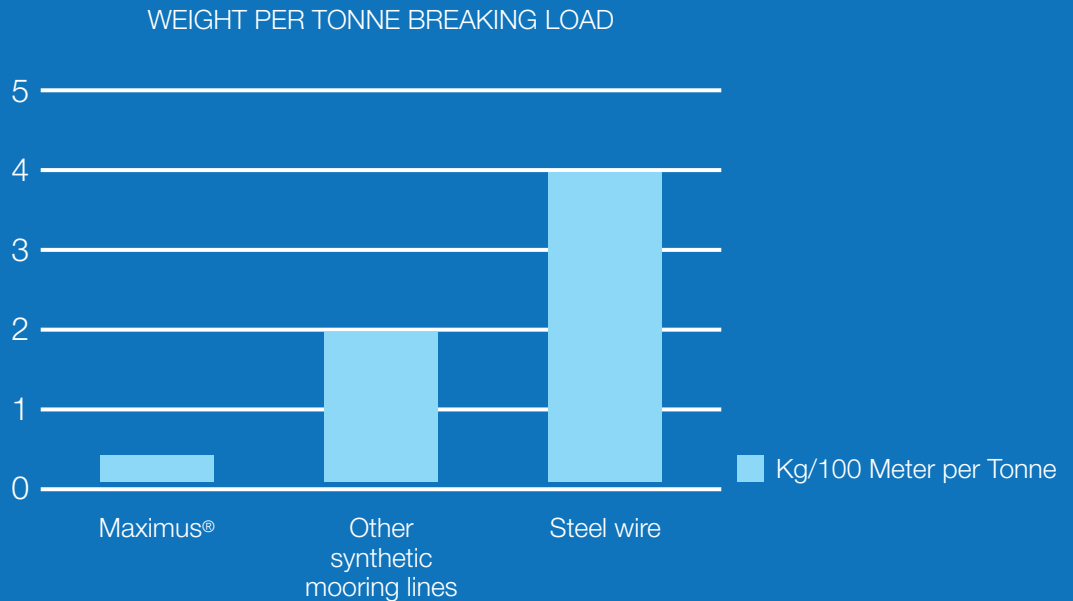
The key to the solution lies in the design of the rope itself, which has been developed by BEXCO at its manufacturing and R&D facilities in Hamme in Belgium in cooperation with DSM Dyneema B.V.



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## LIGHT

Maximus® is an in-house developed new rope with Dyneema® SK78 fibres, creating a light but sturdy mooring solution for large vessels. Ever-increasing vessel sizes have called for mooring ropes bigger in diameter and heavier in weight, making them much harder to handle by vessel crews. With Maximus®, Bexco creates a lighter mooring solution with reduced diameters (up to 50%), increasing the ease of use for crewmembers. Achieving a comparable breaking strength, Maximus® is four times lighter in weight than the most commonly used synthetic mooring ropes, and seven times lighter than steel wire.



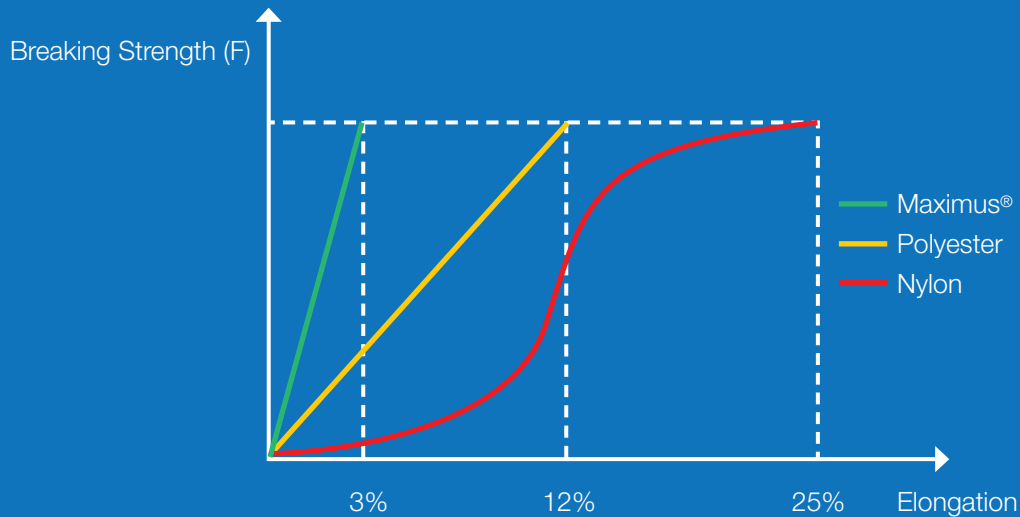
Testimonials from crews on our customers' vessels confirm the ease of use of Maximus®. Maximus® not only allows for efficient and timely mooring thanks to its weight, the unique composition of the rope also allows for a safer mooring solution.

## **SAFE**

Maximus® increases the security on board by significantly reducing the danger zone for crewmembers in the unlikely case a rope snaps. Thanks to the limited stretch of Maximus®, the released energy when snapping is minimal compared to other synthetic mooring ropes.

Due to their elasticity, all synthetic ropes have a snapback when they break (through wear and tear or incorrect handling). The commonly used synthetic mooring rope lashes back with great force due to its high elasticity, which can be hazardous for crewmembers. Also wire ropes have strong snapback unravelling with great, snaking behaviour when breaking. The Dyneema® fibre in Maximus® however, limits the stretch of the rope which makes it behave differently when breaking. The snapback is greatly reduced increasing the security of the crew handling the rope.





## ABRASION RESISTANT

Maximus® is a coated rope. The coating, which is achieved by a specialised coating and drying procedure developed at BEXCO, limits the abrasion common to synthetic ropes, thus significantly extending the lifecycle of the mooring rope.

The Maximus® protective coating has an additional advantage compared to other HMPE (High Modulus Polyethylene) ropes protected by a braided jacket. Whereas a jacket may result in trapping heat inside the rope, potentially leading to damage to the rope strands and thereby reducing its service life, the Maximus® coating will protect the rope against external abrasion without any risk of temperature build-up.

## **MADE-TO-MEASURE**

Maximus® can be produced with different diameters, strengths and lengths in function of the vessel's hardware. BEXCO develops a custom-made Maximus® rope that meets break load requirements (MBL) as per the OCIMF guidelines while not exceeding the Safe Working Load (SWL) of the vessel equipment and taking into account the desired rope diameter in accordance with winch specifications. Also other specific customer requirements can be taken into account.

## **MAINTENANCE AND TRAINING**

BEXCO engineers will be on hand to train the crew in installation, usage and maintenance to get the best performance out of the Maximus® rope.

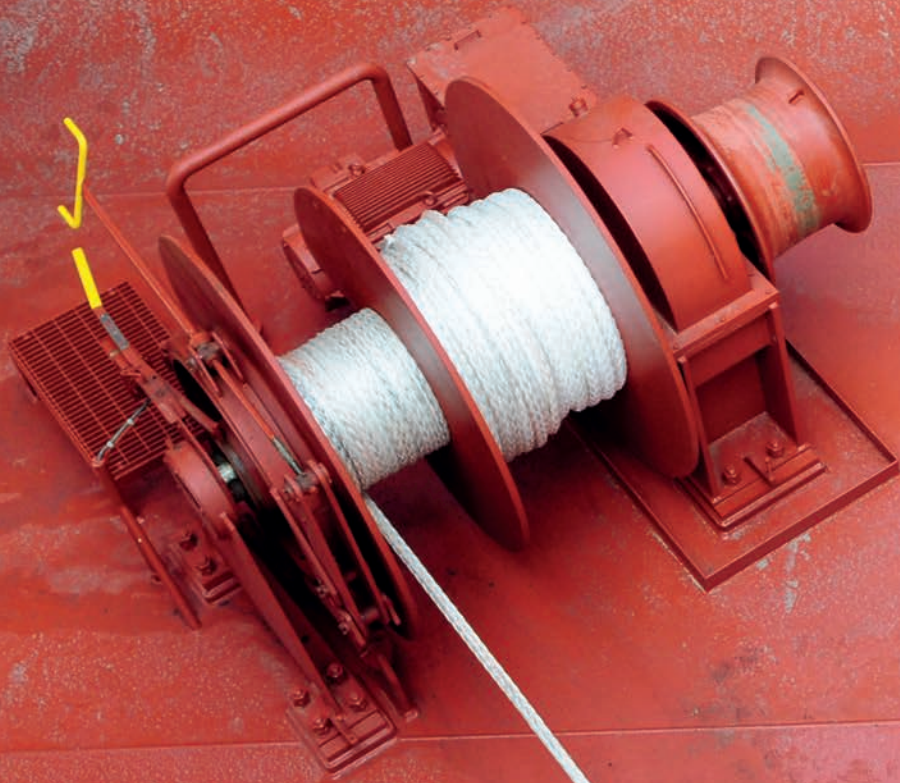
The crew will also learn how to check internal and external abrasion and how to identify the different stages in wear and tear.

During port calls, our engineers can come on board to observe the way Maximus® is being used and advise crews on how changes in way of handling and maintenance can prolong the Maximus® lifetime.

## **STOCK ON DEMAND**

Thanks to contractual stocks in the main ports in Asia and Europe, ship owners and operators can at all times count on the timely availability of Maximus® for their vessels.





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