

DEEPWATER MOORING SOLUTIONS

A leading manufacturer of synthetic mooring rope for floating offshore production systems in deepwater locations

Bexco is one of the principal fiber rope suppliers worldwide. We engineer, manufacture and supply high-quality, made-to-measure synthetic fiber rope solutions for marine and offshore applications.

Over the last decades Bexco has evolved from being a traditional rope-making company to a supplier of high-tech specialist ropes for the offshore market. In the 1990's, Bexco was one of the pioneers to introduce high-tenacity polyester mooring lines for the deepwater market and has since delivered over 600 polyester mooring ropes for both permanent and temporary mooring projects.



BEXCO
OUR ROPE, YOUR SOLUTION



A RESPONSIVE DEEPROPE® COMMERCIAL TEAM

FROM DESIGN TO DEEP WATER

A PRE-SALES PARTNERSHIP

During both PRE-FEED and FEED stages of a deep water exploration project, we openly share our in-depth knowledge to help you make the right design choices. Our engineers are easily accessible, responsive and will offer informed, concrete responses as they sit beside our R&D and production managers at our manufacturing premises.

This same approach applies to the tender itself, which will be completely personalized to every project as no deepwater mooring project is the same. Your account manager will be on hand at every moment to answer your questions and provide valuable input and feedback.

PERSONALIZED PROJECT MANAGEMENT

A permanent BEXCO team is assigned to every project, with the account manager who remains as first point of contact, supported by the senior project manager. In the case of complex projects, our project team is in charge of supervising production in close consultation with the Quality Manager, reporting progress to the customer, managing documentation requirements and ensuring timely delivery.

Our main engineers and account managers are based at our Hamme headquarters in Belgium, liaising with our production team as well as HSEQ, procurement and logistics departments to ensure a smooth, carefully-managed project from order to final delivery sign off.

DEEPROPE DESIGN

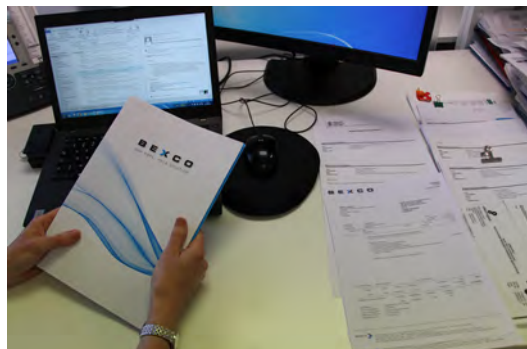
Bexco's DeepRope® design for offshore mooring is based on a standard-sized subrope. Subropes are laid parallel and overbraided with a high-efficiency polyester jacket. The number of subropes used determines the strength of the rope (Minimum Breaking Load).

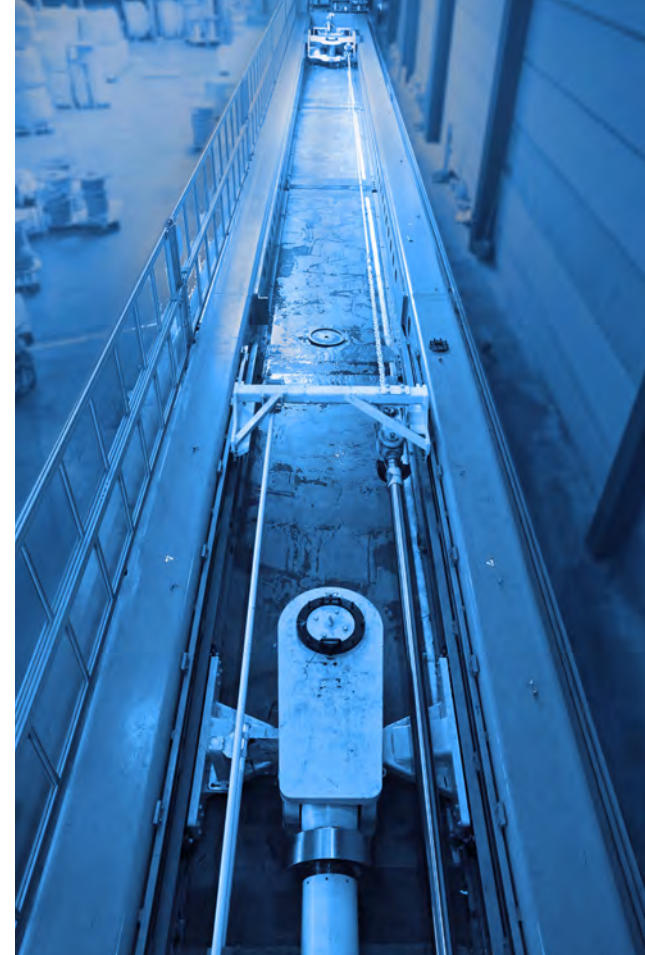
In recent years, Bexco has succeeded in dramatically increasing the efficiency and the consistency in rope breaking strength thanks to smart in-house developed techniques to shape the rope eye end termination. Years of valuable experience gained from the numerous offshore mooring projects and certification testing have resulted in continuous evolution of synthetic DeepRope® placing Bexco as a market leader in this field.

CERTIFIED MANUFACTURER

BEXCO is an ISO 9001:2015 and ISO 14001:2015 certified company with two production facilities, in Hamme and Antwerp, Belgium. The facility in Hamme houses the head office and a production site where Bexco's complete product range is produced. The quayside facility in Antwerp has been recently purpose-built to produce DeepRope® with a larger capacity for rope sizes and lengths.

To keep up with the highest product standards in the market, Bexco is an Approved DNV-GL Manufacturer according the latest DNV-GL OS E303 standard and holds various product type approvals from ABS and BV for its offshore product range.





EXPERTISE FROM BEGINNING TO END

DEEPROPE MANUFACTURING PROCESS

The DeepRope® load bearing subropes are produced in the factory in Hamme. The final stages of the DeepRope® production process including the overbraiding, length measuring, splicing and spooling are executed in the Antwerp factory.

Spooling can be done up to a continuous 5 ton tension, which is a major improvement in the end production process. It allows the installation contractor to spool off ropes from the transport reel with a higher tension thus reducing the risk to bury in ropes in underlying rope layers.

The site in Antwerp is a 150m x 30m production unit 100% dedicated to DeepRope®. Inaugurated in 2015, the production facility is equipped with the most modern machinery including a 140 Ton indoor lifting bridge.

The Antwerp facility is built for growth and has enough storage capacity to house a completed DeepRope® project. Thanks to its waterside location, there are no restrictions in terms of road transport as reels can be loaded directly on to barge. The DeepRope® reels are transported via the River Scheldt to a deep-water terminal in the Port of Antwerp. The proximity to the Port of Antwerp gives us faster access to sea transport reducing the cost of transportation for the end customer.



Increased splicing capacity

Maximum reel size : 7 m x 7 m

Length measurement under 30 ton

Spooling and packing

Lifting capacity 140 ton

Inside and outside storage

Outside storage 50 reels

Load out Quay : 5m draft



TESTING FACILITIES

BEXCO's new, sophisticated in-house R&D facility has been operating since 2015 and performs comprehensive testing of all of its synthetic rope constructions in different configurations. These include break load testing, stiffness and fatigue testing for in house product development and for project class certification.



25m testbed

5m stroke

500Tf + 80Tf cylinder

Break testing

Stiffness testing

Creep testing

Fatigue testing

Water spraying

Extensometer system



INSTALLATION AND MAINTENANCE

Our highly-qualified experts offer full support during offshore installation, which includes repair services. In the case of MODU DeepRope® projects, full onshore inspection and repair services are also carried out by our rope engineers.





PROVEN BY THE BEST

REFERENCES PERMANENT MOORING (2013 – 2018)

Bexco has supplied mooring solutions the world over and to the main offshore locations in the Gulf of Mexico (GOM), Europe, Africa and Asia.

Bexco is an officially approved GOM supplier by BSEE, thanks to the large number of mooring lines delivered to GOM in the past years. This means that by using Bexco DeepRope® mooring lines, the operator is not obliged to test inserts, unless tension exceeds 70%. In the summer of 2012 Bexco performed a Seabed Prelay test in the Gulf of Mexico to qualify DeepRope® mooring lines according to BSEE requirements for seabed pre-laying in a pre-hookup phase. The approval was issued by BSEE in November 2012.

DELTA HOUSE	
Buyer	LLOG
Customer	LLOG
Structure	Semi Submersible Floating Production System (FPS)
Water Depth	1400 meters
Location	GULF OF MEXICO
Number of ropes	26
Rope Length	1000 meters
MBL (Breaking Load)	1700 Tonnes
Year of supply	2013

SHELL STONES	
Buyer	SBM Atlantia
Customer	SHELL
Structure	Floating Production, Storage and Offloading (FPSO)
Deepest production facility in the world (2,900 meters)	
Location	GULF OF MEXICO
Number of ropes	20
Rope Length	1800 meters
MBL (Breaking Load)	1250 Tonnes
Year of supply	2014

TULLOW TEN	
Buyer	Sofec
Customer	TULLOW OIL
Structure	Floating Production, Storage and Offloading (FPSO)
Water Depth	1500 meters
Location	GHANA
Number of ropes	20
Rope Length	650 to 1300 meters
MBL (Breaking Load)	950 Tonnes
Year of supply	2014

KAOMBO	
Buyer	Saipem
Customer	TOTAL
Structure	Floating Production, Storage and Offloading (FPSO)
Water Depth	1400 to 1900 meters
Location	ANGOLA
Number of ropes	38
Rope Length	1100 meters
MBL (Breaking Load)	1150 Tonnes
Year of supply	2015

VITO	
Buyer	Shell Inc. Houston
Customer	Shell Inc. Houston
Structure	FPSO
Water Depth 1	282 meters
Location	Gulf of Mexico
Number of Ropes	26
Rope Length	1070 meters
MBL	1450 tonnes
Year of supply	2019





CONTACT



Carina De Plukker, Deep Water Mooring Manager



Rudi Labeau, Chief Commercial Officer



Karel Devos, Research & Development Manager



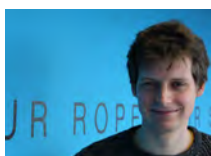
Stijn Steyaert, Senior Project Manager



Wim Peerlinck, Production Manager



Noémie Panis, Quality Manager



Quinten Deltour, Project Manager



BEXCO nv
Industriepark Zwaarveld 25
9220 Hamme
Belgium
Tel: +32 52 499 370
E-mail : offshore@bexco.be
For more information on our products:
www.bexco.be

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