



HARNESSING THE POWER OF THE FUTURE

NEW CHALLENGES, NEW SOLUTIONS

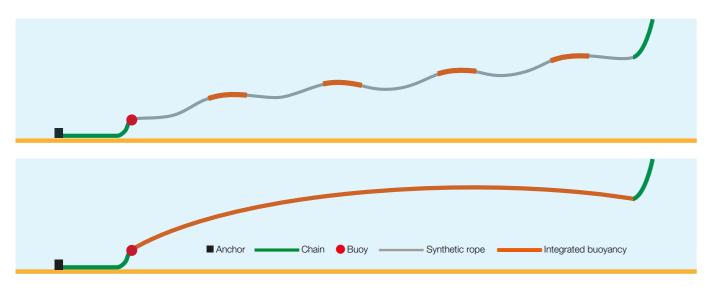
Bexco is proud to offer tailor made solutions for the floating wind market. Solutions that can be designed to utilize Polyester, Nylon and Dyneema® ropes.

These include our recently developed Manta-line rope with integrated subsea buoyancy, taking away the need to manually attach numerous external buoy elements during rope overboarding on the AHV.

Thanks to its distributed buoyancy, it negates the peak tensions often found in mooring ropes that utilize external buoyancy elements. Manta-line reassures that the ropes perform optimally in strength and longevity, thereby also streamlining the certification process.



Below illustrations depict two of the many possible mooring line configurations with Manta-line.



INNOVATION THROUGH PARTNERSHIP

COLLABORATION, THE KEY TO SUCCESS

Our engineers are among some of the most knowledgeable in the business of synthetic marine ropes. They are committed to collaborating with your technical teams in order to develop the most effective and efficient solutions to your project's needs. It's an approach that has lead to us being a highly regarded partner in many of the world's major offshore oil and gas enterprises.



Typical of that partnership approach is our Floating Wind Business Development Manager, Karel Devos, who has also managed the R&D department since 2012. With more than 15 years experience in oil & gas projects, you can count on the

very best analysis, development and installation solutions that are both technically and economically efficient.

We are experts in Polyester, Dyneema® and Nylon mooring ropes. **Topic Comparison of the Comparison

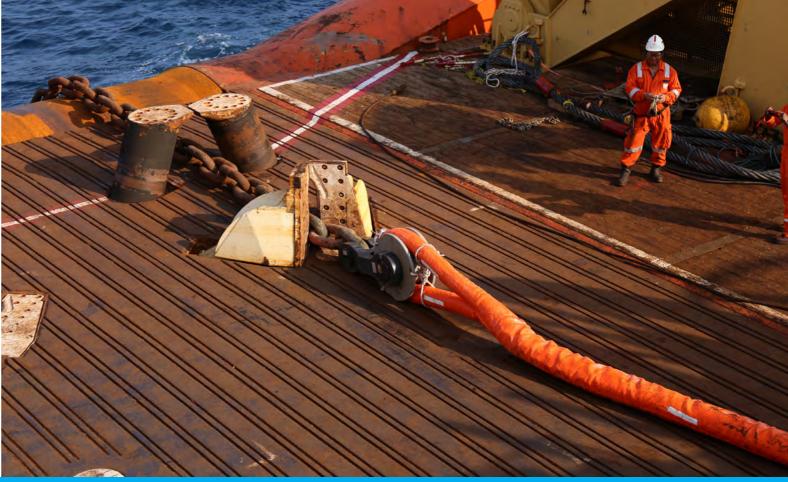
Bexco's R&D is taking on every challenge that lies ahead for floating wind synthetic moorings. Manta-line offers an attractive solution to avoid rope contact with the seabed, while other Bexco mooring solutions are expected in the future. Work is ongoing in several R&D programs and we welcome discussion on an NDA basis about your project and how we can help you.

- Nylon ropes have excellent potential to reduce peak tensions and lower the mooring system cost. Comparisons to Nylon SPM Hawsers with short lifetime are quickly made but are they justified? The durability of Bexco's 'life-optimized' Nylon ropes installed in 2017 on Floatgen demo are currently being demonstrated.
- Prestretch procedures are inherited from Oil and Gas projects, but are they effective in floating wind? Our state of the art test machine, in combination with discussion with industry partners, has allowed Bexco to create an extensive collection of test data and protocols to accurately report results and sensitivities of most installation scenarios.
- Marine growth on synthetic mooring ropes raises questions which need to be answered. With our five permanent mooring projects in shallow water, and research projects with international partners, Bexco is gathering data and knowledge about marine growth on synthetic ropes.
- What about unplanned seabed impact? After four successful seabed prelay tests and multiple lab soil filter tests, we continue to make our ropes ever more robust against new and demanding requirements.

RECYCLING

We cannot ignore that our ropes will one day expire and need recycling. Bexco has taken a first important step to reclaim used Nylon ropes for recycling, and a similar process is planned for polyester ropes. Following the European Union's 'extended producers responsibility' laws, we are taking responsibility to organize the return and recycling of used ropes.





EXPERTISE EVERY STEP OF THE WAY

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. The project team is in charge of supervising production in close consultation with the quality manager and HSE manager, reporting progress directly to the customer, managing documentation requirements, and ensuring timely delivery.

Our engineers have attended offshore installation campaigns and are able to train the clients' engineers and crew on how to handle, inspect and repair ropes on site. We strive to have all details finalised at the kick-off, but when different offshore installation circumstances dictate, we can respond fast with rope stiffness and elongation data.

OUR MANUFACTURING PROCESS

Bexco ropes are produced in two factories in Hamme and Antwerp, Belgium, perfectly located for fast delivery to floating wind projects in EU and UK. The Antwerp factory is quayside, near Port of Antwerp, and gives us quick access to sea transport worldwide.

The Antwerp factory is a 150m long production unit dedicated to permanent DeepRope® mooring ropes, and is built for future growth. Thanks to its waterside location, there are no weight or size restrictions and Bexco can load out full reels of 7x7m and 140 tonnes weight.

Inaugurated in 2015, the production facility is equipped with the most modern machinery for splicing, rope length

measurement and spooling, including a 140 ton lifting bridge. The spooling can be done at a continuous 5 tonf tension, which is a major improvement of the installation process. It allows the installation contractor to spool off ropes from the transport reel with a higher tension, thereby reducing the risk to bury ropes in the underlying layers.



Our capabilities are confirmed by us having delivered more synthetic mooring ropes in recent years than any other supplier in the Gulf of Mexico, North Sea, Africa and Asia-Pacific regions. **J

CERTIFIED MANUFACTURER

Bexco is an ISO 9001:2015 and ISO 14001 : 2015 certified company. We keep up with the highest production standards in the market. Bexco is an Approved DNVGL Manufacturer according to the latest DNVGL OS E303 and holds various product type approvals from ABS and Bureau Veritas for its offshore products range.





DON'T JUST TAKE OUR WORD FOR IT

We've always enjoyed a good relationship with Bexco. Their response to everything from quotations to technical challenges are dealt with quickly and efficiently with any potential issues addressed and resolved prior to delivery.

Oystein Tangas, Can Systems

Bexco's DeepRope is well protected with cover sheathing and PU coating and low allowable bending radius which eases the assistance during DeepRope prelay meant that repairs could directly be performed on the rope without major impact on the schedule.

Audrey Camhi, DVO

I'd like to thank Bexco for the efficient handling of our project. We experienced a responsive, transparent relationship with their team that ensured the ropes were delivered to specification and on time.

Coral South mooring system engineer

I view Bexco as a collaborative partner rather than a transactional supplier, which is key to a successful project delivery. The Bexco team is very responsive and proactive to both commercial requests and technical inquiries. They consistently supply detailed and well-organized technical packages during ITT/RFQ, followed by constructive discussions and open dialogues.

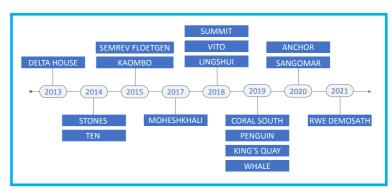
Senior Advisor Facilities Engineer, Subsea, Civil and Marine Engineering, Chevron Technical Center

I have had the pleasure of working with Bexco on many Deepwater mooring projects and found their technical team knowledgeable, enthusiastic, and transparent. One of Bexco's main attributes is that they genuinely care about the quality of their product and the project. I have learned a lot through my interactions with them and always look forward to meeting with their team.

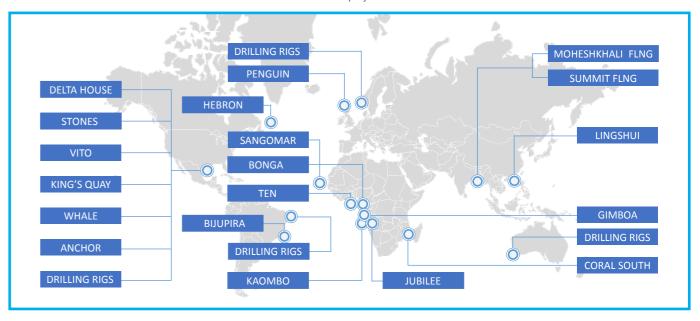
Amir Izadparast, Customer

PERMANENT MOORING PROJECTS

Bexco has supplied mooring solutions the world over including the main offshore locations in the Gulf of Mexico, North Sea, West Africa, Brazil and Asia. Our experience with permanent projects dates back to 2002 with Polyester ropes for Shell Bonga and Bijupira & Salema in Brazil.



Recent projects timeline



prelay process compared to steel wire rope. Bexco's



CONTACT



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