Vryhof, world leaders in the market for innovative and customer-focused anchoring and mooring solutions, has successfully completed extensive field tests with the revolutionary STEVSHARK® REX anchor in Australian waters, proving its suitability for hard soils and carbonate rocks. This completely new anchor with its radically new fluke and shank geometries has already been designated by insiders as the ‘game changer’ in the mooring industry.

In 2016 a total of 15 tests were successfully carried out at three locations in the North Sea famed for their anchoring problems with stiff clays. In early 2017 the new anchor was used in the United Arab Emirates by a rock cutter suction dredger on cemented soils. The results received from this site were also very positive.

For the most recent test Vryhof selected test sites offshore Australia in close collaboration with Woodside Energy, one of the major Australian operators. “We were very interested in getting the test results of the STEVSHARK® REX anchor in remote and challenging territories such as the Angel Field in the North West Shelf of Australia with complex cemented soils of carbonate origin or calcarenite to calcilutite to limestone rocks,” explained Amy Rathmel, Geotechnical Engineer with Woodside Energy. “These geological settings can be quite brutal and very hard, so difficult for an anchor to embed.”

Within a period of several days, Deep Sea Mooring Australia coordinated and executed the test. The 18 tonnes STEVSHARK® REX anchor with 7.2 tonnes ballast was tested in one hundred meters of water at four different locations, each with their own ‘extreme’ soil characteristics. For the execution of the tests, Farstad’s ‘Far Scorpion’, having a bollard pull of 251 tonnes, was deployed.

The first test took place in a carbonate silty sand seabed, up to 4 meters thick and overlaying calcarenite rock. The second test was performed in a thinner sediment (1 – 2 meters), also with rocks beneath. The soil for the third test consisted of calcarenite rock with rough/irregular topography, while the last test was in calcarenite rock with a smooth bedrock surface.

All of the tests were successful. The holding power of the STEVSHARK® REX exceeded all expectations. The open geometry and the protruding fluke tips on the anchor effectively penetrated even the hard rock field at the final test site as predicted.

Leopoldo Bello, Managing Director of Vryhof Anchors said: “We are very pleased with the results of these tests offshore Australia, of course, proving that the STEVSHARK® REX is more efficient, more predictable and stronger, and delivers holding power in extreme conditions unmatched by any other anchor. We are grateful to Woodside Energy, Farstad and our Australian colleagues for the fantastic cooperation. At Vryhof Anchors we offer anchoring solutions based on extensive practical experience, as well as knowledge of the geotechnics, experimental research, modelling and testing. The ability to use anchors in challenging soils is a perfect example of how Vryhof combines its products and services to support its customers in optimising the way they address their challenges in a cost efficient manner”.

Vryhof thinks globally, but operates locally. In most areas around the world characterised by challenging, extreme soils, Vryhof has appointed representatives who are expressly authorised to advise on local mooring challenges.
Vryhof
Vryhof is a trusted partner to many of the offshore industry’s leading companies, delivering innovative and customer-focused anchoring and mooring solutions. We are committed to the highest standards of safety and integrity and are proud of our legacy and impeccable track record, delivering value in everything we do. Our 50-year history of setting standards and leading the way in the offshore sector makes us unique in terms of our expertise and breadth of services.

In recent years, Vryhof and its installation partners have taken full scope permanent mooring projects for offshore oil & gas and renewables applications by offering innovative and cost effective solutions including design, procurement, installation, life extension and decommissioning. Vryhof consists of: Deep Sea Mooring, MoorLink and Vryhof Anchors.

Deep Sea Mooring
Deep Sea Mooring is the trusted choice for E&P (exploration and production) companies and drilling operators that demand the best in safe, innovative and optimum quality mooring solutions. We understand the needs of customers looking for complete peace of mind when operating in the harshest of natural environments. Our aim is to meet individual customer demand and outperform expectations right around the world. With this in mind, we offer a comprehensive portfolio of services, including advanced risk assessment studies, marine engineering, the rental of cutting edge mooring equipment, chain inspection services, complete pre-lay and rig move solutions, and a broad range of ancillary services.

MoorLink
MoorLink and its mooring solutions meet the most extreme needs of the demanding offshore industry. MoorLink designs, produces and installs certified swivel links, connections and wire clamps for use on any chain, wire or rope, and regularly responds to requests for customized components. With our expertise and know-how, we provide safe and flexible mooring solutions that can be adapted to your specific requirements and deliver substantial savings.

Vryhof Anchors
Vryhof Anchors designs and provides drag embedment anchors, chain shortening clutches, such as the STEVTENSIONER®, and related mooring equipment for larger floating structures in the offshore energy industries, including FSRUs, FPSOs, FSOs and large-scale wind applications, as well as for offshore civil applications. Since the foundation of the company in the early 1970’s, our proven and trusted anchor designs have become the industry standard, regarded as being best in both performance and handling. With over 10,000 anchors in operation, our primary focus is customer satisfaction.

For Further Information
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Visual materials

The following video is available for embedment: STEVSHARK®REX 18mT Australia (youtu.be/WQSx0o92pNO)

Picture caption
18mT STEVSHARK®REX after biting calcarenite