

WIRECO SYNTHETICS LANKHORST EURONETE NEWS



24 - 2018

LANKHORST ROPES

Reflective Anchor Lines for Asian Hercules III

Lankhorst Ropes has supplied Lanko®force with Dyneema® jacket anchor lines for the 5,000 ton floating sheerleg crane Asian Hercules III. The Lanko®force anchor lines moor the barge during lifting operations; the rope's low stretch provides a high level of stability while the sheerleg crane is operating. The vessel's ropes also feature a reflective tape braided into the Dyneema® jacket giving the rope greater visibility, enabling the crew to work safely for longer.

Lankhorst assisted Boskalis with onboard installation of the Lanko®force ropes. Commenting Hans-Pieter Baaij, commercial director, Lankhorst Ropes said "Using Lankhorst's mobile tensioner our experienced team installed the anchor lines onto the

sheerleg's winches at the correct tension. Utilising a pre-tensioner ensures a longer service life by preventing the rope digging in and damaging itself."

"Lankhorst provided Boskalis with the necessary information and engineering for applying



Lanko®force with Dyneema® jacket on the winch

Dyneema® mooring ropes onto the Asian Hercules III. Flexibility in setting up the spooling operations resulted in a smooth mobilization of the Dyneema® ropes onto the mooring winches. The crew was provided with an introductory training on the properties of the material

and do's and don'ts of working with Dyneema®. All together fully prepared for the job at hand," said Jeroen Jacobs, Lead Engineer for Boskalis.

Proven Performance

Lanko®force's 12 strand braided design is well-proven in maritime applications demanding high strength and it provides an excellent alternative to heavy and cumbersome steel wire ropes, where manual handling of the rope is required. Further Lanko®force's Dyneema® jacket additionally provides the rope with excellent abrasion and UV resistance.

For more information on Lankhorst Ropes email: maritime@lankhorstropes.com and visit www.lankhorstropes.com.



Asian Hercules III



LANKHORST ROPES



Lankhorst Delivers Shell Appomattox Deepwater Mooring Ropes

Lankhorst Euronete Portugal (LEP) has completed the engineering, design, fabrication and delivery of the deepwater mooring rope for the Shell Appomattox project. At over 63,000m, it is the longest ever rope meterage for a single deepwater mooring contract.

The Shell Appomattox facility will be a four-column semi-submersible production

platform moored using 16 mooring lines arranged in 4x4 clusters, in 2,255m (7,400ft) of

water, approximately 130km (80 miles) offshore Louisiana in the Gulf of Mexico. Lankhorst is supplying 78 rope lengths totalling over 63,000 metres of Lankhorst's Gama 98® polyester deepwater mooring rope with a minimum breaking strength of 21,545 kN.

The Gama 98® ropes were manufactured at Lankhorst's state-of-the-art factory, dedicated to the production of offshore mooring systems, in Viana do Castelo, Portugal. Upon contract award, a significant amount of preparation was required before production of the ropes could

begin, including design and installation of new equipment to handle the size and payload of the ropes. In addition, a period of prototype rope testing was conducted to verify and prove the rope design. This testing included: breaking strength, linear density, stiffness, splice qualification and particle filter testing.

The project involved a number of firsts for both industry and Lankhorst. These included: the first time two mooring ropes being packed on a single reel, the largest (6m dia. x 6.8m traverse) and the heaviest (approx. 120 Tonnes) reels ever handled. A total of 78 ropes of 273mm diameter were manufactured in lengths of 304, 762 and 914m.

"Our ability to successfully complete this most challenging project reinforces Lankhorst's position as the global leader in deepwater mooring," said Neil Schulz, sales director, Lankhorst Ropes Offshore. "By combining our technical expertise with the industry's leading rope engineering and production capability, we've been able to meet the most demanding requirements for this showcase project."



Completed in Viana do Castelo, Portugal - Lankhorst's Gama 98® polyester deepwater mooring rope for the Shell Appomattox project

LANKHORST ENGINEERED PRODUCTS



NRK Award for sustainable KLP® RapidRetain bank protection

- from bottle cap to plastic retaining wall -

During the Evening of the Manufacturing Industry in Media Plaza in Utrecht on March 7 2018, the jury presented the three NRK Awards Sustainable Products 2018. The submitted products were tested at all four phases of a product's life cycle: raw materials, production, use, reuse/recycling. Lankhorst Engineered Products won the Award in the category Construction & Infrastructure with its KLP® RapidRetain bank protection system. This innovative product fits seamlessly with the jury's vision of a circular economy.

The KLP® RapidRetain bank protection system made from 100% recycled plastics is light in weight and can be installed quickly. Due to the extremely strong, unique panel coupling the combi-piles do not have to be exactly placed onto the connection point. So the contractor first installs the piles and then the panels in one go, which means considerable time and cost savings compared to other light weight construction systems.

The KLP® RapidRetain bank protection system neither rots nor splinters, it is maintenance free and has an expected technical lifespan of at least 50 years.

By using recycled plastics, for example from agricultural foil, bottle caps or other household plastics, waste streams can be turned into new products with a long-term life. Like in this case into a durable retaining wall system. At the end of their life the piles and panels can be recycled once again and Lankhorst can again manufacture new sustainable products. Closed loop recycling!

The jury explained their choice for the KLP® RapidRetain bank protection system as follows: *"As a rule, industry sets higher standards for measurement precision than construction and infrastructure sectors do."*

The KLP® RapidRetain bank protection system bridges that gap by a more flexible approach to tolerances in retaining wall constructions. This excellent engineering is partly due to close coordination with customers and users. The modular system and its light weight are HSE-friendly. RapidRetain can be recycled and reused for new elements – the circuit is closed. RapidRetain requires less maintenance and less use of wooden or metal sheets. There's a large market for this product in a country such as the Netherlands."

Based on the NRK Award Lankhorst was then invited to show their sustainable product at the National Plastics Congress in Steenwijk on Thursday the 5th of April. At the official opening by the Mayor of Steenwijk all three award winners were put in the spotlight.



Theo Stijnen (Plastics Europe), Stefan Hofman (Commercial Director Lankhorst Engineered Products), Jur Zandbergen (NRK) and Vivienne van den Assem (presenter) at the NRK Award ceremony on the 7th of March 2018 in Utrecht

Furthermore Rethink Plastics approached Lankhorst to cooperate in a business program called 'Doe Maar Duurzaam' ('act sustainably'), broadcasted by RTL7/RTLZ on the 15th of April, where the rethink initiative was

discussed and some companies were given the opportunity to elaborate on certain aspects of sustainability and circularity. The KLP® RapidRetain bank protection system served as a fine practice example of those aspects.

KLP® Combi Pile Planking and the KLP®-V Pile Planking with glass fiber reinforcement.



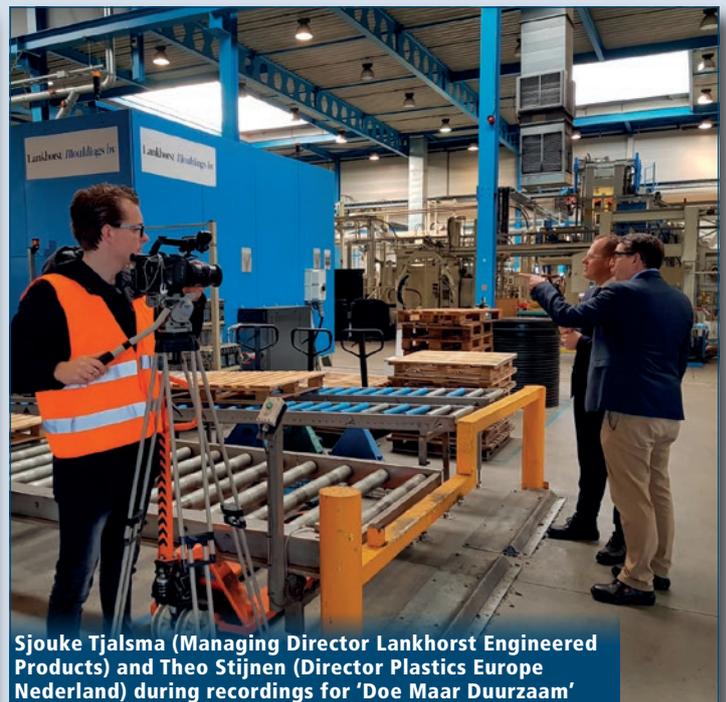
Production and development of the KLP® RapidRetain bank protection takes place in Sneek, at exactly the same location where Nicolaas Jurjan Lankhorst founded "Lankhorst Touwfabrieken" in 1803. KLP® RapidRetain has been especially designed for lighter constructions. Lankhorst also offers solutions for heavier constructions, such as the



Jurgen Groot Landeweer (account manager Lankhorst Engineered Products) at the National Plastics Congress, Thursday the 5th of April in Steenwijk



KLP® RapidRetain bank protection



Sjouke Tjalsma (Managing Director Lankhorst Engineered Products) and Theo Stijnen (Director Plastics Europe Nederland) during recordings for 'Doe Maar Duurzaam'

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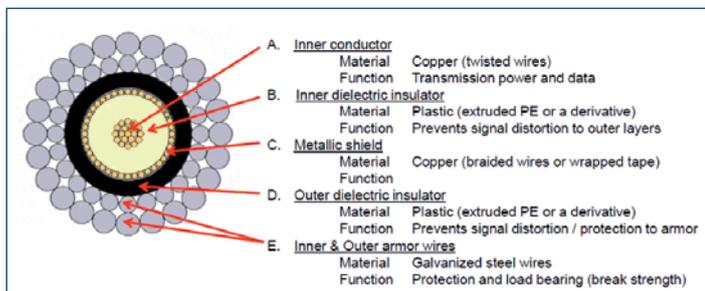


Eurodata®: WireCo synergy for the Fishing Division

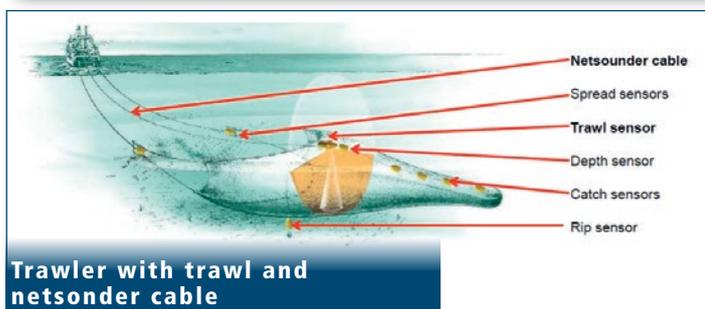
Earlier this year, the Fishing Division introduced a new product range for pelagic fishing under the Eurodata® brand name. Already in 2011, thoughts were floating around to see if Camesa, WireCo's Mexican facility producing electro mechanical cables, could play a role with EMC cables in fishing. Although positive, priorities at that time did not allow for such a project.

Mid 2015, the team at Ymuiden Stores Holland (Fishing Division DC) revived the idea and, together with Bamdad Pouladian from WireCo's corporate R&D department, starting drafting designs of so-called netsounder cables. These cables, comprising steel wire, copper wire and plastic extruded jackets and in functionality similar to a coaxial cable used for TV's, are an integral and critical part of a fishing vessel's trawl gear, as it forms the connection between the sensors on & inside the trawl (e.g. "the net"; up to depths of 1300 meters) and the vessel. The sensors collect data on catch progress and the netsounder cable transfers this data to highly sophisticated monitoring equipment on the bridge where the captain can make decisions on when to haul his gear. After a number

of (mostly) successful field trials during 2016 and 2017, Eurodata® has officially been launched at the start of 2018. During the Fishing Division's global sales meeting late 2017 a product training was held and not long after that, the first orders came through. The first container arrived from Mexico to IJmuiden late January and within two months, not a single meter was left! Fishing companies from all across the Atlantic fishing grounds, from Murmansk in the Russian Far North to Walvis Bay in southern Namibia, have chosen in favour of Eurodata®. New stocks are on their way to IJmuiden and for that, the first repeat sales orders have again already been received, showing the trust in and success of the product. All-in-all a successful project that once again illustrates the synergies that WireCo has to offer!



Eurodata® CX 1100 Netsounder cable cross section



Trawler with trawl and netsounder cable

EXHIBITIONS 2018



LANKHORST ROPES

- 4 – 7 Sept. SMM, Hamburg (Germany)
- 24 – 27 Sept. Rio Oil And Gas, Rio de Janeiro (Brasil)
- 23 – 24 Oct. Offshore Energy, Amsterdam (the Netherlands)
- 29 – 31 Oct. Seatrade Middle East Maritime, Dubai (UAE)
- 12 – 15 Nov. ADIPEC, Abu Dhabi (UAE)
- 28 – 30 Nov. International Workboat Show, New Orleans (USA)

LANKHORST ENGINEERED PRODUCTS

- 18 – 21 Sept. InnoTrans, Berlin (Germany)
- 24 – 27 Sept. Rio Oil & Gas, Rio de Janeiro (Brasil)
- 26 – 27 Sept. Kunststoffbeurs, Veldhoven (the Netherlands)
- 23 – 26 Oct. EuroBlech, Hannover (Germany)
- 25 – 27 Oct. Ankiros, Istanbul (Turkey)
- 6 – 8 Nov. Metalform/Fabtech, Atlanta, GA (USA)
- 8 Nov. Water in de Openbare Ruimte, Houten (the Netherlands)

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- 21 -24 Aug. Norfishing 2018, Trondheim (Norway)
- 1 Sept. Philippines National Tuna Conference (Philippines)
- 5 – 6 Oct. Holland Fisheries Exhibition, Urk (the Netherlands)
- 17 – 20 Oct. Aqua Sur, Puerto Montt (Chile)



Lankhorst Ropes at APM exhibition in Singapore

FROM THE EDITORS

The next edition of Lankhorst Euronete News will be published in November 2018.

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