



Revolutionary lifting slings for heavy-lift applications

Lift-Text[®] Industrie b.v. based in Tolbert in the province of Groningen (the Netherlands) is a ground-breaking and forward looking business specialising in the production and development of textile-based heavy-lift lifting materials. The current product range consists of hoisting straps, polyester heavy-lift slings up to WLL 200T in a circumference of 100 metres, lashing gear, protective sleeves and corner protectors. A number of these products have been widely used for almost forty years in a whole raft of lifting projects, both onshore and offshore. One immensely-strong innovation, developed entirely inhouse, is the EXTREEMA[®] range of HMPE slings and protective sleeves produced in Dyneema[®] man-made fibres. The combination of the light weight and unmatched strength of this fibre offers huge potential for the international lifting world, in particular when it comes to lifting heavy and large volume loads. The innovative product range has been marketed by Lift-Text[®] under the registered trade name EXTREEMA[®], for the past two years.



Your first reaction may well be: Lift-Text[®], never heard of them. And you would be right! Because in principle the company does not supply direct to offshore (sub) contractors or operators. Instead, the company operates an international dealer network in no less than 23 countries. "We are not a full service provider, and against that background there was never reason for us to tell end users about the top quality professional lifting material we produce, in eye-catching advertising campaigns. It has nothing to do with false modesty but everything to do with the fact that it is up to the dealers to sell our products," explained Jeroen Boersma, managing director of Lift-Text[®].

Specialisation

"However, over the past few years, we have experienced technical communication difficulties in the area of sales," he picked up this story. "Here in Groningen we produce anything you can suspend from a hook, including traditional standard straps and sleeves for loads of between 1 and 10 tonnes, and all Made in Holland! Within this portfolio, dealers and manufacturers have over the last few years been importing ever growing volumes of products from China. Although these products are attractively priced, they offer lower quality. As a consequence, our turnover in the traditional markets has begun to shrink.





On the other hand, we have seen growing interest in our products from the offshore market, both the oil and gas industry and the wind energy sector, partly thanks to the trend towards installing completely equipped modules and mini production platforms rather than separate components. Siemens Wind Systems, Areva, Ahlstrom, Technip, Saipem and Vestas are for example regular customers for our slings, as are General Electrics and Enercon. Our response was to go in search of a more effective and cost-saving alternative for steel cables and the polyester traditionally used for carrying out lifting projects. Within that framework, we began to focus our attention on the use of a man-made fibre and the production of slings in special tonnages and lengths, in other words, tailor-made solutions. With our new EXTREEMA[®] slings produced from Dyneema[®], we are on the eve of a challenging commercial period within a niche market that we have successfully very precisely defined. Nonetheless, in terms of marketing, the introduction of this relatively revolutionary product requires a carefully considered adaption of our communication with that market. Exactly which route we intend to follow is currently the subject of discussion with our partners located worldwide. In each country it will be they who establish direct contracts with the end user."

Numerous advantages

Together with CEO Luuk Calboo and sales manager Bert Snel, Jeroen Boersma has set himself the target of establishing a position for Lift-TEX[®] as a reliable market leader in the field of the rapid customised production, research, development and delivery of high quality slings produced from super-strong Dyneema[®] man-made fibre based on UHMWPE (ultra high molecular weight polyethylene), within a reasonable time frame.

Boersma continued: "We have succeeded in developing an innovative product line using these fibres, with as its current highpoint a sling with a safe working load of 500 tonnes and a breaking load (mbl) of 2500 tonnes. As far as we are aware, this makes Lift-TEX[®] unique in the world. The sling is produced up to a working length of 50 metres and a circumference of 100 metres. Following close collaboration with DSM Dyneema[®], we were awarded a definitive licence in October 2012 that allowed us to make use of the fibres patented by DSM. We then started to harmonise our production process for the manufacture of these unique products."

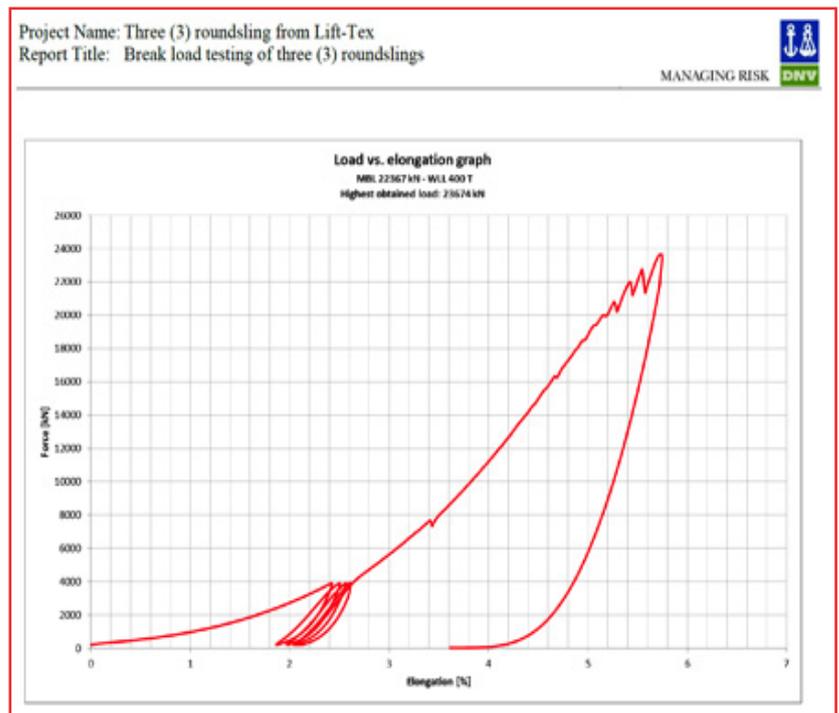
Dyneema[®] offers numerous advantages in comparison with steel and polyester. Thanks to its extreme tensile strength (15 times stronger than steel by weight) and wear resistance, it is possible to lift heavy to very heavy loads with a relatively light weight and ergonomic sling. Unlike (wire) rope slings, where a whole raft of costly handling tools is needed, the compact nature of the material results in a remarkably low own weight making the slings very easy to handle. As well as guaranteeing considerable cost savings, the low weight also ensures a safer work situation.





Test

Sales manager Bert Snel explained: "Our goal for the EXTREEMA[®] sling that we have now produced with a breaking load of 2,500 tonnes was to allow us to determine just how far our knowledge and technology can take us, at Lift-Text[®]. In response, we decided to manufacture the largest possible sling using the production equipment available to us. Theoretical figures suggested that the sling could achieve a working load of 500 tonnes, but to test whether such a fabulous capacity could be achieved in practice, our CEO Luuk Calboo travelled to DNV Norway last September, where they have the largest tensile strength tester in Europe, to put our sling to the test. As the tensile testing diagram accompanying this article shows, the tests were successful. On four occasions, the sling was first brought to a pre-tension of 500 tonnes, and then, without breaking, further drawing pressure was applied to the point that the DNV tensile testing machine automatically switched to secure mode."



Decisive

The ideal situation for Lift-Text[®] would be to have an opportunity to talk to the engineer from the responsible firm at the earliest possible stage of a lifting project, to iron out the precise wishes and specifications. "We have not yet reached that stage," recognised Boersma, "but we are hard at work together with our dealers, who receive constant support in the form of product training courses. Last year, for example, via our dealer in France, we supplied a number of 300 and 400-tonne EXTREEMA[®] slings for a lifting project off the coast of Brazil. These slings were certified both by Lloyds Register and Bureau Veritas. We are now hard at work convincing the international market of the numerous decisive advantages of a sling produced from man-made fibres. Those advantages include improved safety, reliability and durability. We will also need to be able to demonstrate where considerable cost savings can be achieved by using EXTREEMA[®] slings, which at first glance are more expensive to buy than steel or polyester. The real key is Total Cost of Ownership, in addition to which customers can always rely on rapid, efficient and on-time delivery of their sling because our production department is geared to provide precisely that service." Finally, Lift-Text[®] is the only manufacturer in the world that has built a number of inspection moments into the production process, thereby ensuring at a very early stage that the sling will comply with the strict quality demands imposed by the company.

