### 10/2013

# vorld of rope

page 2 HEAVY DUTY PAD EYE page 3 ITC CONFERENCE 2013 ORGANISATIONAL NEWS page 4 CASAR AND THE WIRECO WORLDGROUP FAMILY

## Ship Lifter Lüneburg, Germany

he boat lift close to Lüneburg in the northern part of Germany went in service 1974 and was at that time the largest ship lift in the world. Two water-filled troughs lift ships of the Europa class to help them master the 38 m height difference from the Mittellandkanal to the level of the Elbe river.

Each of the troughs has a length of 100 m, a weight of 5800 t and is lifted by a set of 240 wire ropes which run over large sheaves on top of the 4 large concrete towers. To minimize the needed power for the lift the whole system is counterbalanced with heavy



concrete plates attached to the ropes. After some decades in use the ship lifter has been refurbished completely and the owner decided to update the lifting technology. With the support of the University of Stuttgart the application was recalculated. The top requirement to increase the guaranteed service life to 35 years or 350,000 cycles led to the recommendation of high performance ropes with a plastic covered steel core and finally to selection of CASAR Stratoplast ropes



with a diameter of 54 mm in Lang's Lay. In total 26 km of CASAR Stratoplast has been delivered and installed, the first half in 2012 and now the second tower will follow to complete the rework. This well proven solution will guarantee the required performance over the next decades.



**Blake Chandler** WireCo WorldGroup Senior Vice President Sales

Welcome to our first edition of World of Rope, with more to come on a regular basis. We are excited to share with you developments that pertain to our offering of steel wire ropes as well as industry and company updates. The pace at which information is shared today is ever increasing and we selected this form of communication to better connect to our customer base and to provide meaningful information about our products, applications and solutions to help you improve your business.

We look forward to sharing future editions of World of Rope and we look forward to your feedback.

Best regards,

## Heavy Duty Pad Eye

rom the beginning in 1948, CASAR is known for their close cooperation with crane manufacturers and their tailor-made products to fulfil their customers' special requirements. This close cooperation does not only cover wire ropes, but also rope relevant equipment like end connections or installation tools. The constantly increasing capacities of cranes and winches worldwide lead to rising requirements not only for the wire ropes, but also for this additional equipment. Based on the special requirement of one of our custo-

mers (a large German crane manufacturer), we just developed our latest innovation, the heavy duty pad eye. At first view, the pad eye seems not to be very special as its service ends after rope installation and is not relevant for the crane operation itself. That said, every professional knows about possible mistakes which are typically made during the installation and their drastic consequences. By developing our heavy duty pad eye, we managed to create a strong and reliable installation tool for our partners and customers, especially for mining and offshore



or the a good foundation on the drum, but this places additional stress on the pad eye. There are two different modifications of the heavy duty pad eye available, the first one is completely welded and can be done on site by using inert gas welding. The welding procedure is challenging, has to be done by an expert and provides security due to the extensive welding lines.

The second one is a combination of a swaged sleeve and a welded pad eye. To install the pad eye, the outer strands of the rope need to be peeled off in order to slide the sleeve on the rope core. After we swaged the sleeve, we weld the gap between the sleeve and the outer strands. That combination of welding and swaging provides extraordinary security as we have a big joining surface between the rope and the pad eye and two independent stress lanes within the pad eye.

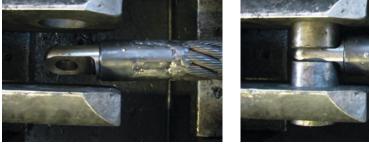
applications as well as huge capacity cranes and

winches where we have long and heavy ropes

to install. Furthermore, we recommend installing

the rope under a pre-tension in order to create

Both modifications of the heavy duty pad eye reach significantly high breaking forces, compared to the former CASAR attachments about double the breaking force. The heavy duty pad eye for a 24mm rope for instance reaches a MBL of approx. 5t and we are even able to further increase the MBL by making small modifications. Special types of construction and configuration regarding freedom of motion, bore holes and so on are available.



Don't hesitate to get in contact with us. We are able to install the heavy duty pad eye to every rope diameter that we produce.



## ITC Conference 2013



**Dr. Oliver Fries** WireCo WorldGroup, Vice President of Global R&D, Innovation and Technology

lowly but steadily the situation on the European construction sites is improving which gives a boost to the use of the existing tower crane fleets too. The International Tower Crane Summit will give an excellent overview on the current situation presented by high level speakers from the industry. CASAR has been invited too and Dr. Oliver Fries, Vice President Research and Development will focus on the best way of selecting the ideal rope for a given application and also to extend the service life of a rope by performing the needed maintenance. The whole event will provide plenty of chances to discuss with Oliver about ropes for your specific situation. CASAR will be very pleased to welcome you in Berlin.

Details about the program can be found on the website of the organizer:

http://www.khl-group.com/events/itc/

#### 4 and 5 November 2013

Kempinski Hotel Bristol Berlin, Germany



#### PROGRAMME

#### MORNING SESSION

Registration, networking and morning coffee

Welcome and opening remarks > Alex Dahm, editor, International Cranes and Specialized Transport, Conference chairperson

#### Global construction markets

> Chris Sleight, editor, International Construction

Regulatory challenges in crane operations > Robert Weiss, vice president, Cranes Inc. And SC&RA member

#### Tower crane solutions for cutsomer benefits

 > Dominique Tasch, managing director, Liebherr-Werk Biberach
> Thorsten Hesselbein, head of tower crane solutions, Liebherr-Werk Biberach

#### Qualitiy control 2.0

> Peter Juhren, national service manager, Morrow Equipment

Adding value tot he UK construction sector

> Duncan Salt, director and general manager, HTC Plant

The Middle East perspective on tower crane rental and distribution > Nabil Al Zahlawi, general manager, NFT

#### AFTERNOON SESSION

Topic to be confirmed > Dr Oliver Fries, vice president global R&D,

innovation and technology, WireCo Groupe Europe

The perfect jobsite – how manufacturers and contractors jointly manage modern day challenges on job sites. > Speaker tob e confirmed. Terex Cranes

Financing Tower Cranes: A look at the current situation and the way forward. > Dr Peter Schiefer, CEO Wolffkran / CECE

Collision avoidance systems – their benefits and potential for development. > Rémi Déporte. Manitowoc cranes

Questions followed by closing remarks and drinks reception in the Foyer Schloss-Saal.

\*The organisers reserve the right to change the programme at any time.



## Organisational News

e're happy to announce that Peter Van der Voorde has joined WireCo WorldGroup since September 1st, as District Sales Manager for Benelux area and Regional Sales Manager for France. He will work partly from his home office in Belgium and partly from the CASAR headquarters in Germany. Peter went to HUB (Hogeschool Universiteit Brussel), where he got degrees in Company Management and Marketing.

He's bringing more than 19 years of experience in the rope industry. After being with Belgian yarn and rope manufacturer Bexco for over 15 years, he joined ScanRope Marine Norway 3 years ago where he worked as International Sales and Marketing Manager.

Peter states: "Market is very demanding and challenging these days, being a financially strong group, able to supply the full range of superior quality products and solutions everywhere on the globe, CASAR will be your partner now and in future days".

## CASAR and the WireCo WorldGroup Family

#### s the technological leader for ropes in the lifting industry, CASAR offers you multiple advantages.

Over six decades, CASAR has delivered proprietary and innovative German-engineered ropes to deliver the highest levels of performance and safety for OEMs and end users. In conjunction with our many OEM customers, our products are designed to meet their highest requirements when it comes to superior breaking strength values, highest bending fatigue resistance, superior crushing resistance and best rotational resistance characteristics, especially for the highest lifting heights.

As a strong OEM supplier, you can be assured that our ropes are designed and manufactured to meet stringent OEM tolerances resulting in minimal diameter reduction under load. In our production process we maintain strict quality assurance and certified manufacturing techniques, exceeding all global standards which helps reduce risk and ensure compliance. CASAR is the original, not a cheap copy. Not only is CASAR rope technology critical, but so is our support. Application specialists and service engineers help the customers to find the best fitting rope out of the extensive range of products available. If needed, a customized rope can be specified for the application. This extensive crane expertise in design, selection, installation and operation allows us to improve rope performance and maximize service life, reducing your total cost of operation.

We are also proud to be part of WireCo WorldGroup, the global leader in wire and synthetic ropes. This financial strength has allowed CASAR to invest in numerous capital improvements to our plant and equipment. WireCo supports our research and product development teams based in Germany, Portugal and the United States to seek the newest possibilities for the highest performing crane rope products. They also bring tremendous depth of knowledge and experience in other industries which we leverage into improved production techniques.

So, the combined strength of WireCo and CASAR helps you as our valued customer to be more competitive in your business.

## INEXT ISSUE WILL BE PUBLISHED IN

#### PLANNED TOPICS:

- PRODUCT AND MARKET INFO ABOUT SUPERPLAST10
- VIEW ON FACTORY IMPROVEMENTS AT OLIVEIRA, PORTUGAL
- WIRECO'S ACTIVITY AT CONEXPO 2014

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