

world of rope

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CASAR Parafit – a success story from Kirkel

When CASAR launched the first hammered ropes into the market in 2003, after intensive in-house testing, no one could have imagined what significance this development would have for the rope-making industry. It was at this time that crane manufacturers' specification requirements for ropes to be used in the erection and boom systems of large mobile cranes increased enormously. Ropes with a decidedly higher load capacity and robustness were necessary. Casar was able to meet these requirements with the implementation of an innovative compression process by which the surface of the rope was finished using a special

technique and purpose-built tools. The increase in breaking strength, the outstanding crush resistance, and the significantly reduced loss of diameter under load that were thus achieved, fulfills the demands placed upon high performance ropes made for this purpose. The extremely smooth surface created by hammering, minimizes snagging and optimizes stress distribution. Resistance to transverse pressure in the cross-over areas is thus lastingly improved, and for this reason, the "Fit ropes" from CASAR are especially well suited for multiple layer spooling.

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Blake Chandler
WireCo WorldGroup
Senior Vice President Sales

If you were one of the thousands who attending Conexpo this year, you are likely feeling the same positive energy I still have after attending. With many years of restraint it was truly refreshing to see momentum once again in the construction industry. As one of the largest gatherings for construction professionals, I was pleased to feel a new spirit of optimism and coordination from companies across the globe. Even more rewarding was the opportunity to meet with many of you, our worldwide customer base. We are excited at the chance to come together to collaborate on projects, and develop better solutions for you with our global partners. I look forward to continuing our conversations.

My very best wishes

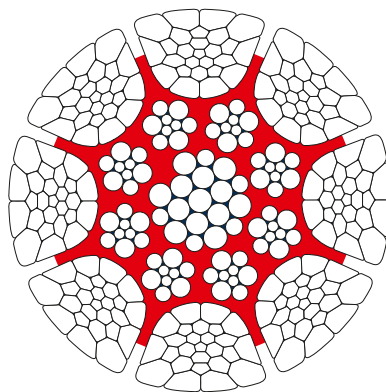
Yours 



The use of a winch on a mobile crawling crane

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A good example for the use of CASAR Parafit is the winch on a crawler crane. Extreme loads are brought to bear on the hoisting drum when erecting the booms during the building-up process, and these must be kept under control. It is the lower layers of the rope on the drum in particular that are put under the burden of high radial forces by the enormous tensile stress arising within the rope. These forces can be so great that the rope is destroyed by the high compression and must be discarded. In the past, the 8 or 10-strand compacted ropes utilised could reduce the level of deterioration, but not prevent it completely, especially in large-scale equipment. CASAR Parafit achieves optimal load distribution by using the parallel lay process, whereby the wires and strands in the interior have linear contact surfaces, which thus help to avoid damage to the rope interior. Furthermore, a higher fill factor results from this spooling method and, as a result, a very much increased breaking strength. A plastic layered core



Rope cross-section - Parafit

stabilises the rope structure and also helps to prevent inner wire breakage. Lubricant is enclosed within the core and keeps water and abrasive elements away from the rope interior. The success of CASAR Parafit speaks for itself. Nowadays, practically all major crane manufacturers who set store upon the highest levels of performance and quality, utilise this specialist rope. On-going development and improvements in rope construction and the production process lead to improvements in the load capacity and durability of the ropes, in order to meet the growing specification requirements of mobile crane manufacturers.

It is not only in the mobile crane sector that high-performance rope is of such significance. The advantages of parallel spooling, hammered construction and a plastic layered core also have a contribution to make in specialised applications such as, for example, the cable plough (see picture below). CASAR Parafit only really demonstrates its true performance capabilities where high dynamic stresses are brought to bear, so-called "shock loads", and where the diagonal pull that would normally bring any rope to its knees. For more than 10 years, FIT ropes from CASAR have set the standard where the very highest level of quality and capability for high-performance ropes in specialised applications is required.

Do you have any questions?

Just contact one of our product specialists.

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The Profile of Simon Hoffälller

Simon Hoffälller has given a boost to the sales team in Europe since his introduction to the company on March 01, in the newly created position of „Sales Manager Europe“. Mr. Hoffälller has extensive sales experience, and over the past 13 years has occupied responsible leadership positions in distribution and sales in international industrial and trading companies, finally as the Director for Sales & Marketing Europe of a global, steel processing and supplier group in the commercial vehicle

industry. Apart from the consolidation, expansion and restructuring of distribution areas within Europe, he has also assumed responsibility for managing the Romanian subsidiary of the corporate group. In his new role at WireCo WorldGroup, he intends to focus, above all, on the strengthening of customer relationships and improved communications with our sales partners.

We would like to wish Mr. Hoffälller all the success in the world!



New testing facility for bending cycle tests

The laying foundation stone for a new service centre at the Kirkel site



To provide customers with the greatest possible benefits has been the core philosophy at CASAR since the foundation of the company. We ensure that the high standards expected by our customers from high performance products are met by innovative products, patented manufacturing technologies and comprehensive verification procedures of our ropes for their subsequent intended purpose. CASAR is making a huge investment in the extension of the inspection and testing facility at the Kirkel location in order to also be able to guarantee this development philosophy in the future. In this way, we are preparing the ground today for targeted product improvements and market-relevant innovations in the future.

The centrepiece of this investment is a rope testing machine that, by means of a continuous bending load on the test rope,

determines the corresponding service life in terms of standardised discard criteria. In contrast to conventional continuous bending machines that operate with single bending, in this new testing machine, a reeving system similar to that found on a crane runs with 5 cable sheaves.

This reeving system results in 5 bending zones with various loading levels (100 %, 80 %, 60 %, 40 %, 20 %) that can be specifically evaluated after the test. The residual tensile strength can also be determined afterwards due to the fact that these levels are symmetrically distributed on both sides and that the test comes to an end when the rope breaks at the point with the highest load. It is also possible to subsequently utilise one half of the rope for opening out and evaluation, and the second half of the rope for residual tensile strength determination.

The measurement of the rope elongation and the determining of rope efficiency as it runs through the sheaves are additional test options and, at the same time, also important rope parameters.

The test equipment is housed in a separate building which is also available to the technical customer service department for testing and rope analyses. Due to the expansion of test capacity, the opportunity to test ropes of other Wireco brands is an additional consequence. For CASAR, this investment implies an important step in the safeguarding of the location and the foundation of a new Wireco Service Centre in Kirkel.

But much more important are the advantages for our customers, who will profit from faster product development times and improved in-process quality control.

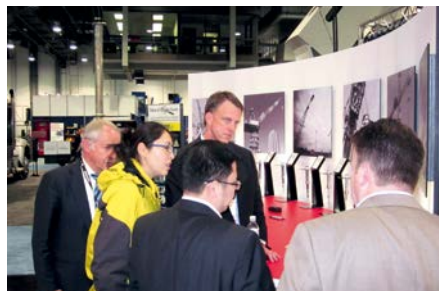
Engineers visited CASAR in Kirkel: Association of German Steel Manufacturers (VDEh)

This year's meeting of the Committee of Technical Experts for Crane Systems at the Association of German Steel Manufacturers took place in beautiful Saarland at the suggestion of CASAR. The contributions on the subject of crane systems in the iron and steel industry were rounded off by Günter Knerr, Director of Product Service at CASAR, with a lecture on the use of special wire ropes in the metallurgical industry. The participants took advantage of the proximity of the CASAR rope factory to make a comprehensive tour of the works.



Conexpo 2014 – A Success for the WireCo Group

Many indicators point towards growth and to a recovery in demand; this was the message of Conexpo 2014. More than 125,000 visitors provided the exhibition organisers with a record number of visitors. Furthermore, amongst the construction specialists there were 31,000 international participants, a new record for visitors from outside the USA.



The commitment to Conexpo has proven to have been absolutely worthwhile for WireCo, too; apart from many specialist discussions with existing customers, we were also able to make numerous new contacts. The special wire ropes of the CASAR, UNION and OLIVEIRA brands consistently aroused a great deal of public interest. Chris Ayers, WireCo's CEO, did not want to miss the opportunity to visit the exhibition, in order to have the opportunity to speak with customers personally.



NEXT ISSUE WILL BE PUBLISHED IN
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PLANNED TOPICS:

- PRODUCT INFO DOUBLEFIT, THE HIGH END ROTATION RESISTANT ROPE
- SHIP LIFTER THREE GORGES CHINA EQUIPPED WITH SUPERPLAST 8
- REPORT ABOUT THE CRANE & LIFTING CONFERENCE ISTANBUL

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