ROTZLER Experts at Key Trade Fairs in 2010

New technologies and systems displayed in Munich, Leipzig and Paris

The first half of 2010 will have seen ROTZLER present its latest technologies and systems for hoisting and pulling applications at three major international fairs in Munich, Leipzig and Paris. By the end of June, the ROTZLER team will have advised trade visitors at the bauma, Interschutz and Eurosatory trade fairs in line with this year’s “Ask the Experts” exhibition theme.

As a leading market forum for the construction industry, the Munich-based bauma exhibition constitutes an important business and presentation platform for ROTZLER. TITAN winches for the loading crane segment formed the main focus of ROTZLER’s exhibits at the fair. In conjunction with various ROTZLER winch accessories – a second focal point at the fair – complete systems can be created for hoisting heavy loads. These accessories also include the new ROTZLER top rollers, which are presented in detail on page 5 of this issue. The NEXUS software program adds quick diagnostics and defect localisation functionality to machines and vehicles fitted with CAN bus systems. Furthermore, NEXUS is an administration and distribution tool for CAN bus control software. NEXUS makes it quick and easy to identify and rectify system problems. Moreover, system diagnosis can be performed during normal operation. Typical applications for NEXUS include cranes, drilling rigs and recovery vehicles.

NEXUS will also be featured at the Leipzig-based Interschutz (Red Rooster) exhibition for rescue, fire prevention, disaster relief, safety and security equipment. In addition, ROTZLER will be presenting a TREIBMATIC TR 030 FIRE winch that is compatible with the new FIRECAN system. FIRECAN addresses control of individual vehicle components such as winches, generators or light towers. Thanks to FIRECAN, operators are always in possession of key data during operational use. Improved cost-effectiveness due to reduced downtimes and fewer customer service call outs are further benefits. In addition to a high degree of user-friendliness, improved controls and economic advantages, FIRECAN is at once innovative, technologically mature and nothing short of indispensable. ROTZLER TREIBMATIC with FIRECAN technology is a future-proof and reliable pulling winch for fire brigades and rescue services.

ROTZLER is not just recognized as an expert for civilian hoisting and pulling operations involving heavy loads, but also and in particular for military applications. In addition to classic winches, ROTZLER provides complex system solutions for military missions, especially ones involving recovery vehicles. In the German Pavilion of the leading international exhibition for military technology, the Eurosatory in Paris, ROTZLER will be presenting customer-specific solutions provided for the military sector. The new label “ROTZLER based” is the new quality seal for premium recovery vehicles. It certifies that only state-of-the-art technologies and products were used in production, e. g. TREIBMATIC recovery winches, (TITAN) crane winches, other vehicle components and also the NEXUS program. Detailed information on “ROTZLER based” can be found on page 4.

Closely followed by reliability and cost-effectiveness, safety plays a central role in all applications in which ROTZLER winches and systems are used. ROTZLER’s know how forms the basis for manufacturing products that satisfy these requirements, regardless of the devices or vehicles in which they ensure smooth operation or increase productivity. After all, ROTZLER is the expert – for winches and more.
The featured nation in this issue of INFORM is the vibrant African country of Tunisia.

Separated from Sicily by a mere 140 km of sea, Tunisia is the northernmost country of the African continent. The Tunisian Republic – the official title of the country, as derived from the name of its capital city, Tunis – borders the Mediterranean Sea to the north and east, Algeria to the west and Libya to the southeast. In terms of size the country covers 163,610 square kilometers and is home to approx. 10.3 million inhabitants. Tunisia’s many years of political stability and the steady rise in its gross domestic product over the past two decades has led to an OECD classification as a “newly industrialized country”. In addition, Tunisia is regarded as the most competitive of Africa’s nations and its economy is highly pro-European, in particular the tourist sector. But Tunisia also looks back on 3,000 years of cultural history involving the Phoenicians, Romans, Byzantines, Arabs, Moors, Italians and Spanish, all of whom left their indelible mark on the homeland of the Berber tribes. Nowadays, these historical traces can still be found in Tunisia’s monuments and museums.

Modernity and Mysticism

Constituting an interface between Orient and Occident, Tunisia manages to combine Oriental charm with fascinating landscapes and a modern economy, which is most evident in the European quarter of the capital, Tunis. The architecture of the city is so steeped in Art Deco that it reminds many visitors of Paris, and its Medina – the old part of the city – numbers among the eight historic locations in Tunisia that were declared UNESCO world heritage sites. Narrow lanes full of stalls hawking multi-colored silks, typical Berber-made silver jewellery, jasmine perfume and skilfully crafted glassware serve to keep history alive. The spot once occupied by ancient Carthage – an enormously powerful city in its day – now counts as one of Tunisia’s most enchanting destinations. And the myriad shades of turquoise typical of Tunisia’s northern shores can give these coastal waters an exotic, lagoon-like appearance.

Deserts, Oases and Stunning Beaches

Tunisia’s variety of landscapes are a fine example of the country’s great diversity. The huge cork forests in the Khroumerie Mountains as well as the valleys surrounding Bizerte are characteristic of the verdant north. Up here, the coastline is full of contrasts – from red-roofed villages and the small harbor town of Bizerte to the impressive nature reserve of Ickheul, which is also nearby. Every autumn a large salt lake in the reserve attracts thousands of migratory birds and the fens draw buffalo to graze close by. The abundance of colorful flora and fauna found in the forested hills is equally captivating.

The south of Tunisia – which actually accounts for approximately half of the country’s territory – is a meld of sandy and rocky desert mixed with salt flats. The intensive colors of the sand dunes, moonlike landscapes and salt hardpans can blur the hard lines between mirage and reality. The magic of this incredible place will be familiar to all “Star Wars” fans. Cape Bon lies at the tip of a small peninsula jutting out in the direction of Sicily. Countless lemon trees grace this most fertile of Tunisia’s regions and the fine sandy beaches are filled with the heavenly scent of jasmine. The tourist resort of Yasmine Hammamet is situated in a highly appealing area of Cape Bon and is one of the most ambitious projects ever undertaken by the Tunisian tourism industry. Created by Tunisian architects the super-modern tourist resort at the northern end of the Gulf of Hammamet has everything a holiday maker’s heart could desire. The country is also dotted with a string of oases from the east to the west. Seemingly taken straight from Arabian Nights, the sound of rushing water, the gurgle of springs, the refreshing gardens, the lush green of date palms plus the paler shade of their plump fruit all go to make Tunisia’s oases extremely special places. These beguiling gardens – patiently filled with life and tended by human hand in the middle of the desert – give visitors a taste of paradise. The largest island off the coast of Tunisia is Djerba (514 km²). As the southernmost island of the Mediterranean Sea, its beauty is said to have already bewitched Odysseus and his men who – as the legend goes – stayed to enjoy “la dolce vita”. And no wonder. The island is a spectacular panoply of color where ivory sands meet limpid aquamarine waters and a lavender-blue horizon. The place also bears many traces of the Ottoman Empire, of which the forts at Borj El Kebir and Borg Kastil are two fine examples. This cosmopolitan and hospitable country has a wealth of cultural and natural attractions to offer. Historical monuments, contemporary culture, desert adventures or a leisurely break along the 1,300 km of Mediterranean coast – whatever you desire, Tunisia has it all.

Further information can be found at: www.tourismtunisia.com
Delivering a concerted pulling force of 2 x 200 kN, ROTZLER HZ double winch aggregates are real powerhouses. Among other things, this robust loading system, which has stood the test of time in the field all over the world, was developed for the purpose of loading and unloading tanks and other heavy equipment. ROTZLER winches perform reliably even in extreme environmental conditions such as sand, heat and cold. These impressive workhorses have now also been fitted in towing vehicles destined for use in North Africa. The decision in favor of HZ winches was based on the customer’s experience of using ROTZLER double winch aggregates for nearly thirty years. The good relationship between the companies and institutions involved, built on many years of fruitful cooperation, was also decisive for the success of the project. The compact winch system was first integrated into a frame and then installed behind the driver’s cab. A holder for a spare tire was also included – and all in ROTZLER’s typical space-saving and user-friendly manner. Once the engineering designs had been approved by the customer, a prototype of the winch system was built in Steinen. Furthermore, a two-day training course was provided for winch operators by the After Sales Service at the ROTZLER plant in Steinen. Participants were able to familiarize themselves with how the system functions and how to operate it. The course also provided instruction on how to mount and detach an HZ 200 winch as well as information on maintaining and looking after the equipment. The units delivered by ROTZLER for mass production of the vehicles were mounted on site at the vehicle manufacturer’s plant.

### ROTZLER hydraulic double winch aggregate

- **Type:** 2 x HZ 200
- **Nominal pulling force:** 2 x 200 kN
- **Rope pull:** to the rear
- **Control:** manual operation from the control platform
- **Rope diameter:** 24 mm
- **Rope length:** 50 m
Winches comply with Current EU Machinery Directive

Safety requirements are satisfied

The recast of EU Directive 2006/42/EC on Machinery took effect in December 2009. Intensive preparation for the new requirements on the part of ROTZLER served to guarantee the continued supply of winches and winch accessories that comply with the current version of the Directive. The Directive on Machinery stipulates that machinery may only be placed on the market or put into service if it satisfies the health and safety requirements set out in Annex I of the Directive. In part, these requirements refer in great detail to general principles governing, for instance, the design of machinery to facilitate safety and handling or the incorporation of protective devices against mechanical hazards like instability, breakage or moving parts.

The basic safety principles demanded by the Directive on Machinery are implemented in more concrete terms in European standards. To prevent differing provisions for comparable hazards or similar risks and to avoid duplication, the safety standard is systematically and hierarchically structured and defines three different types:

Type A Basic Safety Standards: contain general principles for design and general aspects applicable to all machinery and systems in the same or a similar way.

Type B Group Safety Standards: deal with safety aspects that affect several or a range of similar machinery in the same or similar manner or with safety devices that can be used for various types of machinery and systems.

Type C Individual Product Safety Standards: specify concrete requirements and safety measures for all significant risks associated with a machine or all types of a machine.

The following standards apply to winches, for instance ROTZLER TITAN for cranes:

- EN ISO 12100 (Type A Standard): Safety of Machinery – Basic concepts, general principles for design
  - Part 1: Basic terminology, methodology
  - Part 2: Technical principles

- EN ISO 14492 (Type C Standard): Cranes – Power-driven winches and hoists
  - Part 2: Power-driven hoists

In order to place a TITAN winch on the market or put it into service, ROTZLER must issue a declaration of incorporation in accordance with Annex II B of the current Directive on Machinery. This declaration must contain the aforementioned mandatory standards and thus confirms that the requirements of the EU Directive on Machinery have been fulfilled. Thanks to appropriate reference to EN ISO 14492-2, compliance with the Type C standard DIN EN 12999, which specifically deals with loading cranes, is also ensured.

Should you have any questions on this topic, please drop our ROTZLER experts a line at: info@rotzler.de.

Premium Recovery Vehicles?

Make Sure They’re “ROTZLER based”!

For decades ROTZLER is one of the leading suppliers of high performance winches and accessories to leading Recovery Vehicle (RV) OEM’s. The close cooperation with our customers resulted in more and more support which ROTZLER provided, i.e. design support, production support, commissioning support, training and more.

A modern RV today is a complex vehicle covering a number of different tasks, e.g. pulling, lifting and towing which are handled by different equipment. There are demanding requirements related to armour protection and high mobility of the vehicles, which are challenges to the vehicle manufacturers. ROTZLER’s approach allows the vehicle OEM to concentrate on their core competence, which is the vehicle, while ROTZLER addresses the various specific topics of the recovery vehicle.

In 2005 ROTZLER started developing a broad package including basic concepts for hydraulic, electronic and operation, products, support and software development, to fulfill the needs of RV OEMs when designing a new recovery vehicle.

Decades of experience in the winch business, being a core component on a RV, has been used as the basis for the concepts. The knowledge gained from participating in numerous user trials all over the world, supported by modern design principles, has been the key to developing leading recovery vehicle concepts. This enables ROTZLER not only to deliver components but also to act as a consultant to the OEM during the development of the vehicle.

The new label “ROTZLER based” summarizes concepts, products and design under a single label. The two words “ROTZLER based” assure that modern technology and products are included. “ROTZLER based” stands for optimized performance, user friendly operation, on-target maintenance, outstanding functional availability and excellent value for money. Those criteria are not only important for RV OEM’s; in particular army organizations confirmed from experience in past and current deployments the need for premium recovery vehicles.

The “ROTZLER based” label confirms the quality of the result. The products to achieve such results are available from ROTZLER; i.e. various equipment, software development, systems integration design, tools for maintenance support and a large range of possible services. Imperative for products and support is the ROTZLER know-how, which means it is fair to say: “ROTZLER based” systems are the result of using ROTZLER know-how at its best.
Hard Work for ROTZLER TITAN
Winches provide reliable service on drilling rigs

Reliable performance is essential for equipment facing demanding duty cycle applications (high speed, high loads and high frequency of use) and working in extreme operating conditions. For such critical machinery, avoiding downtime is vital. This applies as much to the oil fields of Siberia as it does to the Australian desert. In these and other extreme environmental conditions, ROTZLER TITAN winches provide drilling rigs with invaluable service. From its headquarters in Nisku, Alberta, Canada, Flo Draulic West has been marketing equipment for drilling rigs since 2006. Thanks to its high quality, Flo Draulic West oil field tough terrain, it is critical that equipment functions reliably to ensure uninterrupted production of the rig. Thanks to their reliability and high quality, ROTZLER TITAN winches are a key contributor in such hostile conditions. Despite the fact that the oil sector is also feeling the effects of the current economic crisis, Myles Dalmer, General Manager of Flo Draulic West, is optimistic: “We feel the worst is behind us and we see that many of our manufacturing and drilling customers are beginning to build new rigs for export to other countries, as well as recondition and upgrade existing rigs. We look forward to our future with the oil patch and ROTZLER.”

New Top Rollers for Loading Crane Applications
Optimized accessories for TITAN hoisting winches

ROTZLER’s hoisting winch system for loading crane applications has been further optimized. A brand new suite of top rollers has been added to the accessories range for TITAN winches. Four versions are available with immediate effect: 15 kN, 29 kN, 43 kN and 58 kN. The greatly reduced dimensions of the new design have succeeded in producing a compact solution that is lighter in weight. In addition, the installation-friendly rollers help to save valuable working time. As a new feature the working angle range was extended and now goes from +75° to -90° (relating to the horizontal position of the crane’s boom); an additional safety feature prevents the top rollers from overturning during no-load states. Once incorporated into the hoisting system along with the TITAN winch and the MCD monitoring function, these top rollers comply with the upper hoisting limit set out in EN 12999 for loading cranes. To ensure compliance with current international standards, the system must include matching sheaves for every diameter of rope used.

ROTZLER top rollers naturally satisfy these requirements as well. And the new rollers additionally permit double pull. An optional “maritime” version featuring protective surface treatment can also be made available to meet the special requirements found, for instance, in the fishing industry. All in all, ROTZLER’s robust and durable top rollers serve to improve safety and are now even user-friendlier.

The new ROTZLER top rollers are available in four strong versions: 15 kN, 29 kN, 43 kN and 58 kN. The “maritime” version is on the right.
Swap Body Vehicles – Future-Proof Systems

Versatile special-purpose vehicles for multiple applications

Swap body systems have long stood the test of time in commercial use and are now also becoming increasingly popular with German fire brigades and the THW – the Federal Agency for Technical Relief. As these trucks are also fitted with winches that provide vital technical assistance, INFORM decided to take a closer look.

Flexible System for Perfect Logistics

Since the chassis and superstructure are separate entities in such systems, swap body vehicles are ideal for transporting various equipment to work sites in the form of so-called roll-off containers – or pods as they are commonly called – filled with the required emergency response gear. The swap body loading system that forms an integral part of the vehicle chassis is used to load the respective pods. As a result, swap body vehicles are highly useful for replenishing supplies because they ensure the required roll-off container can be delivered at the respective site as needed and immediately afterwards be free again for other jobs. Thanks to the great flexibility afforded by this “roll-off” load-handling ability, the swap body concept serves to improve the efficiency of logistics systems, especially for large-scale operations. The variety of pods includes the following types: Respiratory/Environmental Protection, Water/Foam, Transportation/Crane, Power Hose, Auxiliary Gear, Technical Relief, Flood Protection and Oil Kit.

Logistic Advantages and More

Compared to the costs of maintaining a fleet of special-purpose vehicles, multi-body systems are a less expensive alternative in terms of running costs (maintenance), initial investment and manpower since much fewer drivers are needed to supply multiple sites with necessary equipment. Ingenious interior space and capacity utilization coupled with easy access to supplies stored inside the pods once deposited on-scene are further practical features. During operational deployment, account must be taken of the fact that pods require level ground to rest on. In addition, once deposited they are very difficult to move again by hand. Should it be necessary to place a pod at some distance from the worksite, the requisite gear has to be transported to the required spot using trolley cars.

440 HP for the THW

Just like many of Germany’s professional, works, airport or voluntary fire brigades, so too has the THW – the Federal Agency for Technical Relief – opted for swap body vehicles. For instance, the Dachau Chapter of the Agency recently favored a 440 HP “swap body vehicle with a back hook system plus a crane-winch combo” over a multi-purpose truck. The new swap body vehicle was allocated to Dachau THW’s second recovery squad (B2). The equipment pod was constructed in accordance with THW specifications and thus complies with the Agency’s strength and equipment specifications. A second pod for bulky gear was also included in the scope of delivery. A ROTZLER TREIBMATIC winch is integrated into the vehicle chassis for the purpose of recovery operations and a ROTZLER TITAN hoisting winch is fitted to the loading crane of the vehicle. Georg Leitenstorfer, local THW representative, further explained that the new flagship of Dachau’s THW was perfectly geared towards performing the task of providing local hazard control, which is also included in the Chapter’s remit.

Vehicle at the fire brigade of “Münchsmünster” industrial park

New flagship for Dachau THW

Vehicle of the works fire brigade of Jülich research centre

Swap body truck at the fire brigade of “Münchsmünster” industrial park

Vehicle of the works fire brigade of Jülich research centre...
Knowing that the right equipment can help to save lives, the professional fire brigade in Koblenz insists on using only the most reliable gear – which includes a HAB crane plus a ROTZLER TITAN winch aboard the brigade’s fire-fighter ship.

However, this is only a relatively minor example of the way in which the crane-winches combo supports the firefighters in their daily work. “The crane and the winch are both extremely important tools for our work,” emphasized Günther. “For instance, we use the crane and winch duo to hoist the heavy mobile pumps on boats that have sprung a leak and that quickly need to be bailed out.” In the event of a fire on board ship, the crane is used to heave the heavy hoses over the ship’s railing, which not only makes the process much faster, but also much safer. Fires aboard ship are always highly difficult to contain and count as one of the most dangerous tasks performed by the RPL1. In such situations, it is imperative that every crew member makes the right split-second decisions in extremely cramped conditions. After all, even the smallest mistake can lead to disaster. When fighting a fire in the engine room, for instance, the area is flooded with foam. If water were to be used, the hot metal would immediately cause it to evaporate, which in turn would have fatal consequences. Whether they break out on land or on the water, fires are often found to have similar causes.

The large barges found navigating the Rhine and the Mosel are furnished much like any normal home. As a result, an iron that is left plugged in or a short-circuit in the TV can just as easily cause a fire on one of these “houseboats”. Thankfully, extinguishing fires aboard ships and boats is not an everyday occurrence for the professional fire brigade in Koblenz. The RPL1 is mainly called out in the event of average damage, to help in rescue and search operations and to provide technical assistance. The RPL1, including all equipment, was purchased in 1975. In the course of the years, the technology aboard the fire-fighter ship was constantly updated to keep abreast of the latest developments. The crane with the ROTZLER TITAN hoisting winch was added, which provided the professional fire brigade with some very welcome extra assistance for the important work they perform. As Herman Günther put it on behalf of his entire crew: “we’re nothing without the right equipment”.

Crane Truck fitted with TREIBMATIC

New addition to the “ROTZLER fleet” of the Bochum Fire Brigade

The rear-mounted TREIBMATIC winch is protected by a special cover.

The professional fire brigade in Bochum – BFW for short – prefers to play it safe, which is why a new crane truck and three rescue vehicles are all fitted with ROTZLER TREIBMATIC recovery winches. The new 70-tonne LTM 1070-4.2 fire brigade crane made by Liebherr has replaced the brigade’s trusty old crane, which was “retired” after 28 years of service. Collisions involving trucks, explosion sites or rescue operations for people stuck in ditches or on roofs due to traffic or domestic accidents are just some of the classic situations in which the crane truck is an indispensable helper. A rear-mounted TREIBMATIC winch delivers 80 kN of pulling force that make it possible to recover broken down vehicles or remove debris following storm damage. The four-axle vehicle features a 50 m telescopic boom and is powered by a 367 HP diesel engine.

Markus Wendelberger, chief technical officer at BFW Bochum, gave the following reasons for choosing a TREIBMATIC TR 080 winch: “ROTZLER winches have always guaranteed superior performance combined with a long service life and top quality. Opting for ROTZLER again was therefore an easy decision to make.”

The handy controller (left) ensures safe and simple winch control.

TREIBMATIC winches have also been used in the three rescue vehicles operated by BFW Bochum for many years.
40 Years of Service

Klaus Kessler celebrates his long-service jubilee

Klaus Kessler looks back on a long and successful career at ROTZLER. Having joined the company at the age of 16 to pursue vocational training as a machine fitter, he subsequently quickly advanced from skilled tradesman to the position of foreman. In 1981 he successfully obtained his master craftsman certificate and in 1982 assumed the post of managing the test department. Since 1990 he has headed ROTZLER’s fitting and installation department. Rainer König, Mayor of Steinen, made a special point of honoring Klaus Kessler for his many years of loyal service. In the presence of ROTZLER’s entire workforce, König presented Kessler with a gift hamper and a commemorative certificate issused by the state of Baden-Württemberg.

Happy Children thanks to Donation

Winch manufacturer supports regional pre-school facilities

Providing support for projects that promote children and young people is a tradition that ROTZLER holds extremely dear. This time two regional facilities benefited from the generosity of the company. The first of these is the Dora-Merian playschool in Höllstein. With the help of ROTZLER’s donation, the facility is having a wooden adventure playground consisting of huts on stilts constructed in its gardens. As a result, the playschool’s interestingly designed outdoor area will soon boast a further piece of attractive playground equipment that will give the 68 children between the ages of 2 and 6 an opportunity to practice and develop their social skills. This adventure playground provides three different levels that are perfect for any number of role play games. Regina Doppstadt, the head of the facility, is particularly pleased about the speed with which the project has progressed. The equipment will be ready for the children to enjoy in spring 2010.

Go for Goal – with ROTZLER Winches

Football team kicks its way to success at regional tournaments

A number of ROTZLER employees would appear to have discovered a whole new “field of application” for ROTZLER winches. And the field in question is no odder place than a football pitch. In fact, the football players making up the ROTZLER team coached by Lothar Schneider not only feature their own brand of winches, our ROTZLER kickers are more, just like operations involving the “original” TREIMATIC, TITAN and HZ winches. What’s more, just like operations involving the “original” ROTZLER winches, our ROTZLER kickers are also regularly crowned by success:

Patrick Roser, TC 1 (TITAN)
Jürgen Knoll, TR 200 (TREIBMATIC)
Branko Radovic, TR 080 (TREIBMATIC)
Patrick Meier, HK 075
Ralf Gerischer, HK 450

Every player displays a winch name on the back of his shirt in addition to his player number.

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