

EDITORIAL

ANDREAS KLAUSER

DEAR PARTNERS AND FRIENDS OF PALFINGER,

This issue of PASSION is all about the customer. Because for PALFINGER, the customer is at the heart of everything we do. When developing new products, we always have individual customer needs in mind. We see ourselves as a partner and value the importance of cultivating a personal relationship with our customers. One of our partners even went so far as to choose our cranes as marriage witnesses! This is why the cover story is a particular highlight, even for me (page 6).

The fact that we understand the requirements that our customers place on our products and services and work together to actively shape them can also be seen in the development of the TEC range (page 8).

But we also like to meet people personally, such as at our open days in Spain and Lithuania (page 24). We ask questions, take note of suggestions and are as open to criticism as we are to new ideas and praise. All of this feedback is collected in a carefully planned and organised process by our market research team. Turn to page 30 to find out more about what exactly our market research team does.

The intensive collaboration with our customers can also be seen in our training sessions and courses, which are precision-tailored to the customer vehicle and loader crane configuration. Our training services, which are described on page 26, ensure that our customers can use their working equipment as effectively as possible.



Our digitalisation strategy, too, revolves around how we can utilise innovative, digital solutions to make our customers' lives easier and safer. The 'Smart Boom Control' boom tip controller (page 10) is just one of our highly successful digital solutions.

It's our customer focus that makes PALFINGER so special - and this runs like a thread through this issue of PASSION, in which we put the spotlight on both the 'partner for life' and our customers.

Happy reading!

Andreas Klauser





06 COVER STORY
A PARTNER FOR LIFE

Our products made for some highly unusual witnesses at the marriage of Stergia and Paris.

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A PARTNER FOR LIFE

It's no secret for our customers that PALFINGER is a dependable partner for life. But Paris and his wife Stergia gave

this concept a whole new meaning, because the guest list for their Greek wedding back in May included three rather more unusual 'marriage witnesses'.

Maximum performance – for a lifetime. That's what PALFINGER products promise. And on 4 May, Paris made a lifetime promise to his wife Stergia on the island of Rhodes. The happy couple sealed their matrimonial bond before the 'eyes' of three unusual witnesses: our PK 92002 SH, PK 85002 and PK 74002 loader cranes were 'special guests' at the ceremony - and featured prominently in proceedings.

But how did they get the idea of making such unusual additions to the traditional guest list? For Paris, this is an easy question to answer. As a dedicated employee of a PALFINGER partner in Greece, he was keen to express his passion for his job on this special day, too.

LIFETIME EXCELLENCE: A Greek wedding with some rather unusual witnesses

'My wife-to-be had no idea I'd be arriving at the church on a crane. When she saw me arrive, she was speechless,' he

said, reminiscing on this amazing surprise. And it must have been a pretty spectacular moment for the wedding party, too, seeing our knuckle boom cranes lending their support to the happy couple. As you can imagine, the cranes standing in front of the church made for some pretty eye-catching photos. 'It was an unforgettable day not only for us and our guests, but also for passers-by — after all, nobody had ever seen anything like this on Rhodes. Everyone stopped what they were doing and took videos of us.'

We would like to congratulate the young couple - who, incidentally, are now expecting their first child — on their marriage and wish them all the best for the future!





DIFFERENT STEEL CON-STRUCTIONS

Experts will instantly see the difference between the SLD and TEC: the extension boom system for the SLD models has a conventional hexagonal profile. This solid and efficient design is the right choice for routine, everyday tasks. The TEC

models, however, have a tear-drop-shaped, polygonal P-profile, an innovative design that makes the boom system both lighter and more stable — a crucial factor in complex specialist tasks.

DIFFERENCES IN OPERATION

The different steel constructions clearly indicate that PALFINGER designed the SLD and TEC cranes to perform different tasks. The strong, robust SOLID cranes are perfect for simple loading/unloading tasks, everyday use by public authorities, loading pallets on building sites or grapple applications with bulk material. Whether performing complex lifting tasks at height in urban areas or complex installation work with heavy loads, operators benefit from the wide range of equipment and comfort systems available with the TECH-NOLOGY cranes.

TEC FOR COMPLEX TASKS

Specialist deployments require a certain degree of precision and finesse - and the PALFINGER premium range TEC is designed with this in mind. Whether complex challenges in

The application areas of cranes are more diverse than ever, which is why PALFINGER places great importance on ensuring that the right options are available whatever the task. With the SLD (SOLID) and TEC (TECHNOLOGY) ranges, PALFINGER remains true to this mission. And from a technical perspective above all, both ranges offer an impressive – yet unique – range of benefits.

urban areas, lifting tasks that require high outreach or the assembly of heavy machinery, TEC cranes are up to any specialist task and allow crane operators to perform complex tasks with precision, safely and efficiently.

The TEC range features three model lines: TEC 3 -

entry-level model featuring basic options, but with a P-profile and TEC steel construction; TEC 5 — top model with an extensive range of options; TEC 7 — high-end line that can be equipped with all assistance systems. The PALFINGER TEC cranes are available in the 25–58 and 135–200 metre-tonne classes. This year, PALFINGER unveiled ten new TEC models in the 25–37 metre-tonne class, with two new additional products in the 50–60 metre-tonne class following in early 2020 (read more on page 11).

The TEC cranes achieve maximum mobility and performance thanks to their extension boom system featuring an innovative P-profile and Power Link Plus, a double linkage system that keeps the crane's lifting capacity constant thanks to linkage systems between the knuckle boom and main boom and the main boom and crane column. The 15-degree reverse linkage system allows operators to reach through low door openings and work inside buildings. All comfort functions and assistance systems such as P-Fold, Soft Stop, RTC, MEXT, WEIGH, FPM and, in the future, Smart Boom Control are available with the TEC range (read more on page 10).

SLD FOR STRONG PERFORMANCE, EVERY DAY

You don't need a specialist crane for straightforward loading and unloading activities, just one that is simple, strong and robust. And this is where the SLD cranes come in. They meet all the quality standards you expect from PALFINGER and additionally come with an attractive pricing policy. Everyday use by public authorities and routine deployments on building sites are just some of the impressive strengths of the SLD cranes.

The SLD range represents the 5–25 metre-tonne class and, like the TEC range, comprises of three model lines: the SLD 1 is available only as a non-CE model with optional overload protection, making it ideal for international markets not subject to strict EU guidelines. Once the crane has been shipped, PALFINGER ensures that the equipment can be properly maintained and serviced. The SLD 3 and SLD 5 lines are available in a CE or non-CE version. In the SLD range, PALFINGER presented four new models in 2019.

Operators benefit from both the outstanding lifting capacity and the robust steel construction of the traditional hexagonal profile. For the SLD models, PALFINGER offers various selected features including HPSC-Plus LOAD, A-HPLS and radio remote control, allowing every crane to be optimised for the task in hand thanks to a range of additional equipment.



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SMART BOOM CONTROL HIGH-TECH FOR LOADER CRANES

SMART BOOM CONTROL IS A HUGE HELP WITH TRICKY TASKS. CRANE OPERATORS CAN FOCUS MORE ON THE BUILDING SITE AROUND THEM RATHER THAN JUST ON THE MOVEMENT OF THE CRANE. THIS MAKES THE WHOLE JOB SAFER AND MORE EFFI-CIENT.

Wolfgang (Bärli) Niederndorfer PALFINGER Special Crane Operator

Smart Boom Control makes it much easier to control the boom tip. All the crane operator needs to do is specify the direction of the boom tip horizontal, vertical or a combination of both. PALTRONIC

then calculates the precise motion of the boom tip. 'Smart Boom Control is a huge help with tricky tasks. Crane operators can focus more on the building site around them rather than just on the movement of the crane. This makes the whole job safer and more efficient,' says Bärli, a PALFINGER special crane operator who tested this innovative feature back in April at bauma 2019.

The feature is perfect for markets such as the waste disposal industry, where waste containers have to be emptied carefully, precisely and quickly. The function now performed by Smart Boom Control used to require three or four separate crane functions – but now, thanks to Smart Boom Control, all that's

The new 'Smart Boom Control' boom tip controller allows loader cranes to be controlled more easily, more intuitively, more safely and faster. The new feature will be available from 2020 and is compatible with TEC 7 cranes.

deployments, but also considerably reduces the time required for training operators. To ensure that the feature is ready to go live in 2020, the

needed is a simple movement

of the lever on the radio con-

sole. This ease of use not only

saves valuable time during

high-tech TEC 7 model line is already being prepared for this innovative technology.

For operators, Smart Boom Control is exceptionally convenient and user-friendly. The mode is started remotely via PALcom P7. Operation is simple and intuitive – even during a control process, the operator can switch to the required mode at the touch of a button if necessary. The system automatically calculates the direction of movement by means of position detection and pressure sensors. Smart Boom Control additionally features a range of different settings that the operator can optimise in line with the specific crane application.

FIRST TEC CRANES FOR THE 50-60 MT CLASS

When developing new products, PALFINGER always has individual customer needs in mind. This is why expanding the 50–60 metre-tonne class was the next logical step. With the PK 58.002 TEC 7 and PK 55.002 TEC 5, PALFINGER showcases two cranes specifically designed for challenging tasks.

flexibility and are specifically designed for complex deployments where maximum manoeuvrability is needed – in urban areas, for example. Both cranes are equipped with the highly practical continuous slewing system, which enables them to operate with an unlimited slewing range.

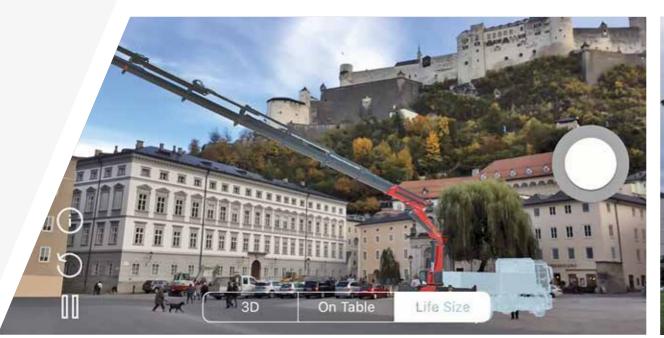
The TEC range currently comprises the two heavy-duty cranes PK 135.002 TEC 7 and PK 165.002 TEC 7 as well as ten smaller cranes of between 25 and 37 metre-tonnes. PALFINGER is now closing the gap in the 50–60 metre-tonne segment and offering operators even more options supporting, for example, complex urban deployments. PALFINGER had already showcased the prototype PK 58.002 TEC 7 at bauma 2019: this crane and the PK 55.002 TEC 5 are scheduled to go on sale in spring 2020.

The two new TEC models will be available in the TEC 7 and TEC 5 model lines, with the PK 58.002 TEC 7 featuring the full range of equipment and all PALFINGER assistance and comfort systems. Like all TEC cranes, the new PK 58.002 TEC 7 and PK 55.002 TEC 5 are characterised by their versatility and

Both cranes can be additionally equipped with the new PJ090 fly jib as well as the currently available PJ150 fly jib, which means that the TEC 7 crane with fly jib can achieve a maximum range of more than 31 metres and a lifting capacity of around 55 metre-tonnes. Thanks to the huge range of PALFINGER equipment assistance systems, users can optimise their crane for the task in hand and perform any task efficiently and com-

Like all TEC models, the latest TEC cranes also feature the triedand-tested P-profile. Not only do operators benefit from a stable yet lightweight boom system during operation, the innovative steel construction also means that no additional maintenance is required between the service intervals.









THE LATEST CRANE MODELS DIRECTLY ON YOUR OFFICE DESK

The newly relaunched PALFINGER XR app features a whole range of new functions and gadgetry that you can play with at home. In addition to numerous new models, it contains two exciting features enabling you to visually take in the latest highlights and details. The app can be downloaded from the App Store and Google Play.

'XR' stands for 'extended reality' - in other words, the extension and merger of our reality with embedded 3D animations. The phrase 'extended reality' is currently more or less synonymous with 'augmented reality', although it is quite distinct from 'virtual reality', in which simulations play out in a wholly virtualised world. PALFINGER first entered the world of extended reality back in early 2018 when it developed the PALFINGER XR app.

This autumn, the developers relaunched the app and kitted it out with lots of exciting new functions and enhanced graphics. While the app still offers the 3D simulation feature that allows you to obtain a comprehensive overview of the technical highlights of the crane, it now has two impressive new functions that blur the boundary between simulation and reality. The 'On Table' function presents all available PALFINGER products as scale models directly on your desk and, of course, allows you to rotate the products as well as display and zoom in on all the little details.

Another especially exciting innovation is the 'Life Size' feature, which allows you to visualise the loader crane – including

carrier vehicle - in its actual size right where you're standing. When using this function, you should stand either outdoors or in a large hall with sufficient space. To zoom out with this function, simply take a few steps back to enjoy a life-size view of the truck and loader crane.

You can use the 'Screenshot' function to take snapshots, as you can see in the picture above: here, the PK 135.002 TEC 7 is pictured against the beautiful backdrop of Salzburg's Old Town with the Hohensalzburg Fortress in the background.

And now it's over to you: download the "PALFINGER XR" app from the App Store or Google Play Store and send your best snapshots to us (sales@palfinger.com). If you're lucky, you could be in line to win some great prizes!

And what's more, you can also play product videos using the XR app. Use the XR app to scan the video marker for the new PALFINGER crawler crane on page 32.

JOIN IN THE FUN: PALFINGER IS ON FACEBOOK. INSTA-**GRAM AND OTHER SOCIAL MEDIA PLATFORMS**

PALFINGER's fan community on social media is growing all the time - and not without good reason. For fans and followers of PALFINGER, this is the easiest way to stay up to date with all the latest news and information – all day, every day. This direct line of communication with PALFINGER and PALFINGER's fans all over the world is the best way to enjoy the full PALFINGER experience.

STAY INFORMED AND JOIN IN THE FUN

Stay informed and always up to date, get to know our products and services and gain some fascinating insights into life behind the scenes. Customers, potential customers and fans can do all of this online with PALFINGER. On social media, PALFINGER's world is so close you can almost touch it whether it's a tough special deployment, an international PALFINGER event or a special report from inside the company. PALFINGER also regularly reports on the latest news and presents a range of practical services. PALFINGER fans from all over the world can use the comments function to chat with each other and communicate with the company.

THE COMMUNITY IS ACTIVELY INVOLVED

For PALFINGER, direct contact with the community is very important. The social media team's mission every single day is to address the desires and interests of the community members. One initiative that is especially popular with the community is Fan Friday, in which active fans can use Facebook, LinkedIn or Instagram to send in pictures of PALFINGER products in action – from all over the world. New products – for example, the current campaign for the new TEC range, which PALFINGER users are busy sharing and liking as we speak - also feature prominently on our social media.

BECOME PART OF THE COMMUNITY

Whether you're passionate about technology, interested in the business or just love pictures of impressive machinery, PALFINGER has the right platform for you. Interested? Then become part of the PALFINGER social media community!

Facebook is still the platform with the biggest fan community. The community keeps up to date via Facebook and can engage in a dialogue with PALFINGER and other fans.

O INSTAGRAM

A picture is worth a thousand words, which is why PALFINGER also likes to let the pictures do the talking: visit our Instagram site for pictures of cool equipment and machinery and exciting deployments.

YOUTUBE:

Visit our YouTube channel to watch videos of our products in action all over the world, informative tutorials and other exciting content.

Find out all there is to know about our company, what makes PALFINGER such an attractive employer and what projects we currently have in the pipeline. Career networkers can visit PALFINGER's LinkedIn profile for a range of personalised content, information and business news.

As you can imagine, a company such as PALFINGER has a lot of stories to tell. The PALFINGER blog contains a range of fascinating articles covering sustainability, events and, of course, product presentations.



NEW ANTI-TWIST PROTECTION ON THE CRANE

The task of combining the crane and vehicle to create the perfect tool for the customer is performed by certified mounting and service centres. The crane base is fitted with an anti-twist protection system at two points

to prevent the base from twisting due to the slewing motion of the crane. Normally, a steel plate is additionally welded onto the finished crane base. Not only does this take a lot of time, but the paint finish at the point where the plate was attached

THIS IS A MORE COST-EF-**FECTIVE SOLUTION FOR THE** MOUNTING CENTRE BECAUSE IT REDUCES EACH MOUNT-ING PROCESS BY MORE THAN TWO HOURS.

Head of Product Management for EMEA loader cranes at PALFINGER

Our job doesn't end once we've shipped the crane. The design of the crane and its mounting on the truck have to go hand in hand. The new anti-twist protection on the crane base of the TEC models makes life easier for the mounting specialists.

fully applied original coating. This is where the new anti-twist

also has to be touched up, a

process that damages the care-

protection system comes in: the special wear plates welded onto

the auxiliary frame contain two square, laser-cut recesses.

The crane base is fitted with two reinforcement plates that contain pre-drilled elongated holes. The anti-twist protection system itself takes the form of a small, square block, which is placed into the wear plate to create a positive connection between the base of the crane and the auxiliary frame of the vehicle - no extra welding required! All parts - in other words, the wear plates and anti-twist protection system - are contained in the mounting kit for the new TEC models and can, if required, be shipped along with the crane.

'This is a more cost-effective solution for the mounting centre because it reduces each mounting process by more than two hours,' says Michael Völker, Head of Product Management for EMEA loader cranes at PALFINGER. 'In addition, even before the crane is shipped, a template can be used to precisely position the wear plates and create the elongated mounting pockets.' And once the mounting process is complete, there's no need to touch up the paintwork on the crane - yet another advantage of this system!

THE NEW **E-JOYSTICK FOR L-CRANES**

The new e-joystick has been available since early 2019 for the TEC cranes PK 22.001L TEC 7 and PK 26.001L TEC 7. This new type of control is based on electronic servo-controlled joysticks and pedals, which allows HPSC-Plus LOAD and S-HPLS to be used for the first time ever on L-cranes not equipped with radio remote control. This ensures that customers that do not want to use radio remote control can also benefit from the lifting capacity and functionality of the TEC 7.

The PALFINGER L-cranes, which are characterised by their long main boom, are designed especially for transporting construction materials and for situations where fast and user-friendly control as well as efficiency and cost-effectiveness are crucial. And now, thanks to the e-joystick, HPSC-Plus LOAD is also available for L-cranes with top seat control. HPSC-Plus LOAD detects the level of loading and uses the inclination as an additional parameter for stability, improving the crane's reach.

Operators are impressed with the highly sensitive control. In addition, all functions - including the stabiliser system and additional stabilisers - can be controlled directly from the top seat. The VR simulator, which was developed by PALFINGER and showcased at bauma, gives crane operators the chance to enjoy a highly realistic experience of controlling a crane from the top seat. In the words of Thomas Schwaiger, Senior Director, Sales & Marketing Loader Cranes EMEA: 'The simulator is also very popular because operators can

L-crane and learn how to control a crane using an e-joystick. This will also allow new hires and people starting out in this industry to be trained up more quickly and easily as well as enhance safety and ease of use.'

The new PALFINGER e-joystick controller makes life much easier for crane operators in the top seat of the L-crane. The crane is controlled as normal using joysticks and pedals, except that these are now electronically servo-controlled.





BUILT FROM OUR BEST

seen the current campaign, with many of the initial products and ads showcased at bauma back in April 2019. The focus is

on the P-profile, which gives the TEC range its characteristic appearance and is a refinement of the traditional hexagonal profile of the SLD range. The tear-drop shape increases the torsional strength of the entire extension boom system and also enables an extremely lightweight design. While these selling points are often enough for the cost-conscious buyer, TEC cranes are also exceptionally low-maintenance, feature sliding

This is why the first product to feature in the current campaign highlights the development of the P-profile under a fitting title: 'Built from our best ideas'. But, contrary to what you might believe, the best ideas don't come in a flash of inspiration from a genius – the best ideas are the fruits of collaboration

Do successful companies and products really need advertising? And what are the goals of the current communication campaign focusing on the high-end solutions of the PALFINGER TEC crane series?

among dealers, customat PALFINGER, where mechatronics engineers, hydraulics specialists, steel constructors, developers, control technicians and designers all work

together. This teamwork inspired not only the unique P-profile, but also a range of innovative applications such as P-Fold and HPSC-Plus LOAD as well as various mechatronics solutions such as the rope winch and associated systems.

The current campaign takes the best ideas and presents them in a range of media and formats, in numerous different languages and in both analogue and digital form. Trade ads in leading international media and national dealer packages have been - and will continue to be - used as a basis for preparing blog articles on the website and producing videos, which, in turn, are reposted on social media to reach the attention of interested users on Facebook, Instagram and LinkedIn. Various different PALFINGER departments such as Product Management, Brand Management, Graphics, External Communication and external partners all work together here, too.

From image processing to the finished subject: the TEC campaign not only highlights the benefits of the PALFINGER TEC crane range, but also explains how it differs from the SLD range.

Position I continued with

THE PERFECT OFFER PALFINGER CONFIGU-RATOR

PALFINGER is known for developing innovative, reliable and efficient lifting solutions for commercial vehicles. A high level of flexibility and expertise in production and a global sales and service network safeguard that all-important competitive edge. The PALFINGER configurator provides the global dealer network with yet another exciting tool, this time for preparing offers.



EACH SELLER PREPARES A STANDARDISED OFFER, WHICH NOT ONLY MAKES LIFE MUCH EASIER FOR OFFICE-BASED EMPLOYEES BUT ALSO ALLOWS US TO PREPARE ORDERS MUCH MORE QUICKLY.

Jorma Hellberg and Timo Lankila VTA Finland



From left to right: Hannes Roither, Andreas Klauser, Wilfried Haslauer (Governor of Salzburg), Johannes Griessner, Hannes Palfinger

invested €6 million in the construction of a new, high-spec test hall for heavy-duty cranes. At the Köstendorf site, each crane undergoes thorough functional testing before leaving the plant.

PALFINGER has

KÖSTENDORF NEW TEST HALL OPENED FOR HEAVY-DUTY CRANES

Around 600 people work at PALFINGER's Köstendorf site, which is located some 12 miles north of Salzburg. This is where the R&D department – the 'brain' of the loader crane - is based, and it is also where PALFINGER's heavy-duty cranes (those delivering more than 40 mt of lifting torque) are assembled and tested. PALFINGER's leading position in this metre-tonne class, its continued growth and the intensive testing procedures required for loader cranes were the factors that ultimately inspired PALFINGER to invest in this highly functional, high-spec test hall. Construction began around one year ago, and the hall was opened in June 2019. Costing €6 million, this was the biggest investment in the Köstendorf site for a long time. The results are impressive: at eight test stations, the PALFINGER specialists work in twoshift operation to put heavy-duty cranes and railway solutions through their paces.

A STRONG LOCATION

The official opening of the new test hall in early June offered not one but two reasons to celebrate. Festivities were held for the employees and neighbours of the Köstendorf site. The event was also attended by high-ranking local politicians and the PAL-FINGER group management team, who were keen to witness for themselves the capabilities behind this expansion project. Guests included the Governor of Salzburg, Wilfried Haslauer, and the Mayor of Köstendorf, Wolfgang Wagner, as well as Hannes Palfinger, CEO Andreas Klauser and COO Martin Zehnder. PALFINGER enjoys a close connection with Köstendorf

that goes back many years: 'It was around 30 years ago that we first found a plot of land here in Köstendorf — and the rest is history. Since then, the site here has been a long-running success story,' explained Andreas Klauser in his inauguration speech. 'That's another strength of this site: many of our ideas originate in Köstendorf, especially when it comes to innovation and R&D,' said the CEO.

PALFINGER SALES CONFERENCE

Immediately following its opening, the new test hall played host to the annual PALFINGER Sales Conference, which was attended by around 200 people from all over the world. The slogan for this year's event was 'Learning by Doing', and guests were able to visit numerous different stations where they had the opportunity to perform practical tests on all of PALFINGER's products. Events such as these are crucial milestones on our mission to expand our leading position on the market together with our partners. The feedback from the participants was certainly very positive. Under the slogan 'CONNECTED TOGETHER', the company also addressed the main talking point of our times: digital services, especially in the field of telematics. The future will be marked by intensive connectivity and direct communication with our customers.

This investment in the new test hall in Köstendorf is just the beginning: with innovation and market leadership written into PALFINGER's DNA, we can look forward to many more investment projects in the future.

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PALFINGER CRANES ON THE JOB **OUT AND ABOUT WITH OUR CUSTOMERS IN AFRICA**

UGANDA HOME TO THE BIGGEST LOADER CRANE IN AFRICA

Sogea Satom already had a number of PALFINGER loader cranes in its fleet, including the PK 18500, PK 23500 and PK 32080 models, and it recently became the

proud owner of the biggest loader crane in Africa: the PK 100002, which has a dead weight of 10 tonnes, was mounted on a Renault 8x4 carrier vehicle. It is being deployed on an important infrastructure project: a roughly 34-mile-long pipeline connecting a new water purification plant with the capital city in order to supply

Uganda is a landlocked state in eastern Africa and home to around 35 million people. Its capital, Kampala, which has a population of around 1.5 million, is the economic centre of the country. The PALFINGER customer Sogea Satom, which is based in the suburbs of Kampala, recently expanded its fleet.

tonne precast concrete elements required for constructing the

the rapidly growing population of Kampala with sufficient clean drinking water.

The new loader crane is helping to deliver and position the eight-

water conduit. The crane is sometimes exposed to extremely adverse conditions, but that's no problem for the robust PK 100002. Furthermore, the local PALFINGER partners are providing the necessary maintenance and service support.



PALFINGER **SUPPORTS** SENEGAL

ital city, Dakar. The key industries in Senegal are agriculture, fishing, construction, tourism and mining. The government has proposed a plan of action for modernising the local infrastructure as a means of further bolstering the competitiveness of its economy. PALFINGER is proud to support the nation in its efforts to achieve this.

DID YOU KNOW?

around 1 million living in the cap-

Lying on the west coast of Africa, Senegal peacefully gained full independence from France back in 1960. Senegal is today home to around 15 million people, with

PALFINGER, too, has turned its attention in recent years towards Africa. One of the most recent success stories of this summer comes from Senegal. Blue Box, our local partner in the region, has provided 20 trucks – fully equipped with PALFINGER products – to help with the further expansion of the Senegalese electricity grid.



Marked by a range of challenges including heat and wind, the deployment conditions under which the equipment and machinery are operating are anything but straightforward. The trucks help with installing electricity masts, laying underground cables in sand and red earth, constructing the five power stations and loading and unloading construction material. All these activities run smoothly only if the products are efficiently deployed. And the key to successful deployment is

20 trucks – 13 of which are equipped with loader cranes and 7

with access platforms - are being deployed.

that PALFINGER's expertise will be successfully passed on to the operators. In Africa, too, PALFINGER has put in place a convincing after-sales concept including a clear chain of information with

direct service provided by a local partner and remote maintenance with the assistance of an expert. As Philippe Savournin, managing director of the local dealer, stated during the handover of the machinery: 'We are extremely proud that we can contribute to PALFINGER's success here on the African continent. Our comprehensive package has really won over our customer in Senegal. We are delighted about this fantastic



NEVER UNDERESTIMATE THE IMPORTANCE OF ANY FLUID THAT FLOWS THROUGH THE VEINS OF YOUR EQUIPMENT.

PALFINGER LUBRI-CANTS FOR PREMIUM **EQUIPMENT**

to deliver outstanding performance every

service life. While their importance may

not always be appreciated at first glance,

premium lubricants are crucial to the high

performance of PALFINGER products.

In collaboration with our supplier Shell, PALFINGER has developed its own lubricant package that is perfectly optimised in line with PALFINGER products and their applications. The package comprises a range of hydraulic oil types (PREMIUM/EXTREME/BIO)

and gear oil that can be used across our entire equipment portfolio and are available throughout our global network (in Germany initially). The viscosity of the new oil is optimised in line with the requirements of PALFINGER's products and their applications. As a result, the oil not only supports optimal force transmission, but also reduces friction, absorbs heat, keeps all the parts and components clean and protects them against wear and corrosion, thus improving performance.

From production and installation through to service – all areas benefit from the use of one single, high-quality lubricant throughout the entire service life of a product. This prevents undesired effects that can arise when different hydraulic oil types are mixed, e.g.:

- Poor air release
- Foaming
- Cavitation
- Pump damage
- Reduced service life of seal elements
- Poor filterability
- Noise

WELL-OILED PROCESSES

In-house tests as well as field tests conducted over the past two years in Canada, Denmark, Sweden and Austria have demonstrated how PALFINGER's specially developed oil not only boosts performance but also makes it easier to control the machinery – especially in regions where temperatures can

High-quality oils help PALFINGER products fall as low as -30°C and under tough conditions, as Kristoffer single day. They also significantly increase Szalach from K:S Krantranz i väst AB in Sweden can confirm: 'Thanks to the new oil, my crane performs outstandingly all day long, even when the oil is cold. The entire

system operates consistently and smoothly."

PALFINGER's new lubricant package will now be rolled out step by step in selected pilot markets - with Germany first in line.

This new oil is just the beginning, however, and will eventually form the basis for a whole new oil maintenance concept. Regular crane oil checks will help to increase the length of time between oil changes, which will not only prove more cost-effective but also save resources and reduce the environmental impact.



Kristoffer Szalach K-S Krantranz i väst



SISTENTLY AND SMOOTHLY.





TIME FOR FRUITFUL DISCUSSION

Lithuania and Spain may be separated by around 1,500 miles as the crow flies, but the two countries do have at least one thing in common: in these northern and southern European states, the 'open days' organised by the PALFINGER dealers are a real hit with their customers.

enterprises took up the invitation to this event. One thing that is always present at any PALFINGER event is, of course, a 'standard bearer' – in other words, a

in the heart of the most southerly Baltic state. With its 50-strong team, KMT offers sales, mounting and servicing as a one-stop shop. Selected customers were invited to an open day in August to celebrate the opening of the new site. Around 40 customers representing different segments and encompassing everything from ma-

jor customers operating fleets of up to 30 trucks to one-man

KMT has been PALFINGER's

official partner in Lithuania

for the past 15 years and

recently opened its new

site in Kaunas, a city right

heavy-duty crane flying the PALFINGER flag. In Kaunas, KMT chose a PK 135.002 TEC 7 for this role.

Over the past one-and-a-half years, PALFINGER Ibérica in Spain has already organised four open days. The Spanish market is, of course, much bigger than the Lithuanian market, so

WE LIKE TO TAKE THE TIME TO UNDERSTAND EVEN BETTER THE CHALLENGES THAT OUR CUSTOMERS FACE IN THEIR DAILY WORK. ONLY BY DOING THIS CAN WE DELIVER THE RIGHT SOLUTIONS.

Andrius Zaveckas Managing director of KMT

it's no surprise that the events in Spain have in the past attracted as many as 150 guests. The traditional venue in Spain is the workshop and business premises of the regional sales and service partner. This venue also gives guests the opportunity to take a look behind the scenes.

'We are really happy with the open-day format because it allows our customers to experience our products up close and try them out,' says Andrius Zaveckas, managing director of KMT in Lithuania. And Jörg Schopferer, managing director of PALFINGER Ibérica, adds: 'To me, the benefits are obvious: the specialists on site can answer questions and are always

open to requests and suggestions for improvement. We get really great feedback from our customers!' So after numerous fruitful discussions and product tests, the open days in Spain and Lithuania can draw to a leisurely conclusion in a relaxed atmosphere with good food.

Incidentally, in Lithuania, a customer just happened to be close by, noticed the PALFINGER flag flying 30 metres above the ground and, with his curiosity piqued, came to see what was happening. So the standard bearer really did do its job—and, of course, spontaneous visitors such as this customer are always welcome.

 $\frac{24}{2}$



WELL PREPARED TRAINING ON YOUR OWN MACHINERY

We've all been there: you buy yourself a new gadget and it takes weeks before you know how to use all its features and functions. To ensure that PALFINGER customers know how to use their working equipment right from day one, the PALFINGER MCC offers a one- to two-day training course tailored to the customer vehicle and loader crane configuration. Many customers value this and keep coming back for more.

pleted truck. This introduction is given by the project manager, who is responsible for implementing the customer requirements in consultation with Sales and overseeing the entire project from development to mounting.

AT THE VEHICLE

EARLY IN THE MORNING

The PALFINGER trainer wel-

comes the crane operators

to the MCC handover hall in

Lengau. Then it's straight

down to business. First on

the agenda is an introduc-

tion to the crane, which is

mounted on a recently com-

The trainer drives the vehicle to the area in front of the hall and starts to explain the various crane functions. First he tells the crane operators gathered here today about the functions and features available with the PALcom P7 remote control. After this brief introduction, the participants are able to position the radio-remote-controlled

supports around the vehicle in preparation for unfolding the crane. The trainer explains the basic functions of the crane and fly jib and then talks about the cable winch and the routing of the rope through the guide pulleys and pulley heads all the way

to the hook block. The trainer then explains and demonstrates the SRC and RTC comfort functions that were ordered, after which the participants get the chance to practice using them.

AFTER LUNCH

Now it's time to try out the workman basket. After this, the fly jib is removed and the two-line cable guide is tested while the crane is in operation. Thanks to the new user-friendly hose and cable guide, which allows the jib to be attached beforehand, the otherwise tricky task of reattaching the fly jib can be completed quickly and with ease.



A SHORT COFFEE BREAK

This was a great opportunity to discuss the lifting capacity diagrams for the vehicle as a whole and for the trainer to provide important information about stability in every possible position and situation. The trainer then talked about the new Flow Sharing crane function and the enhanced display for overloads on the PALcom P7 radio remote control.

AND FINALLY...

An important part of our courses is comprehensive training on how to handle the crane in an emergency by means of the emergency control panel and auxiliary power unit for workman basket operation. Once the handover log has been signed, it's time for the crane to take on its first job.

Are you also interested in a professional handover of your vehicle in the PALFINGER MCC? If so, simply contact your relevant sales partner.

While there's almost nothing new that a PALFINGER employee can tell an experienced crane operator about how to handle and operate a loader crane, our customers are now purchasing complete vehicles featuring an ever more extensive range of features and functions. So it's vital during handover that crane operators are informed about all the accessories and software applications that come with their new crane and vehicle. Only when the crane operator has no further questions and the customer can leave the yard satisfied with their new purchase can we say:

'THAT WAS A SUCCESSFUL DAY.'

Patrick Maislinger Quality Assurance & Vehicle Handover MCC

 45°





Boots truck R



BODYWORX 2.0 SUCCESSFUL INTERPLAY BETWEEN THE CRANE, TRUCK AND BODYWORK

The vehicle body is crucial to the performance of the vehicle as a whole. Low weight and a high degree of safety deliver enhanced added value for PALFINGER customers. Our R&D team works hard to identify ways of reducing the dead weight of the crane itself and, in turn, the entire vehicle solution. Weight, bodywork modularisation and truck-related innovation were the focus topics of BODYWORX 2019, which took place for the second time in Salzburg.

The two-day event was attended by 140 participants from 23 countries. Experts met to discuss in detail all the current challenges relating to vehicle bodywork. In addition to major truck manufacturers and PALFINGER's very own bodywork specialists, all the leading bodywork manufacturers in Europe took up the invitation. Representatives of all the leading truck manufacturers – VOLVO, SCANIA, MAN, DAIMLER, DAF and IVECO— were in attendance and provided insights into the latest features of their vehicles.

The majority of information and discussions related, of course, to product innovations and changes to regulations over the coming months and years, with the focus on the most important aspect for bodywork manufacturers: the chassis interfaces – not only electrical and mechanical interfaces, but also the

different options for power takeoff units and mounting preparations available 'ex works'. The gathered experts also had the opportunity to answer a whole host of questions relating to frame reinforcements and the integration of front stabiliser kits.

Following the event, the participants were asked about their main expectations and how effectively these were fulfilled. Participants cited above all their desire for information about products and mounting instructions from PALFINGER and the truck manufacturers. PALFINGER fulfilled these expectations with an approval rating in excess of 90%.

For PALFINGER, too, BODYWORX is an important motivation to clearly formulate the PALFINGER mounting strategy and to see the crane, carrier vehicle and mounting not as standalone islands but as elements of an overall solution. This will ensure that PALFINGER's partners can continue to benefit from all the necessary know-how. Needless to say, BODYWORX 3.0 is already being planned.



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PASSION | MARKET RESEARCH

MARKET RESEARCH OUR EYES AND EARS ON THE MARKET

The market research team conducts around 15 to 20 studies and market analyses every year, with the range of tasks encompassing everything from evaluating sales figures, localising and

translating questionnaires and conducting the actual studies through to evaluating and discussing the findings and, in turn, deriving the necessary measures. From Australia to Norway, from Brazil to Japan — customers in nearly all the relevant markets have already been surveyed in a series of structured information-gathering processes. And in some countries, this has been done several times.

One particular challenge is ensuring that the studies are always optimised in line with the specific needs and circumstances of each individual country and customer group. So a survey in Finland, for example, is always conducted in the Finnish language. This highly professional approach would not be possible without the outstanding cooperation of our dealers in the different countries.

PALFINGER's market research team develops the basic format of the questionnaires in close consultation with selected

In 2022, PALFINGER will be celebrating its 90th birthday. Right from the outset, the company has always focused on engaging in dialogue with customers and users. Only by engaging directly with their customers can companies turn not only requests, suggestions and ideas but also constructive criticism into successful solutions. PALFINGER's market research team continuously delivers the data needed to achieve this.

universities to ensure that they yield statistically relevant data. To ensure that the answers can be compared over time, the central questions in the questionnaire have not been changed in three years. This allows us to see what the situation used to be like, what measures were implemented and whether these have had a positive impact on customer satisfaction.

ONE-ON-ONE DISCUSSIONS PROVIDE VITAL FEEDBACK

In addition to the traditional survey using questionnaires, one-on-one discussions also play a key role in qualitative market research. The feedback that customers provide when talking directly to their dealer and that the dealer then passes on to PALFINGER is included in the market research analyses, as are the findings identified by the Product Planning Committee. This forum, which takes place on a regular basis in Austria, is attended by dealers from all segments and countries. Together they engage in general discussion

THE FEEDBACK BOTH FROM OUR STUDIES AND OUR ONE-ON-ONE DISCUSSIONS PROVIDE US WITH CRUCIAL INFORMATION. THE FINDINGS ARE ALWAYS EVALUATED AND DISCUSSED AT THE HIGHEST LEVEL BY THE HEADS OF DEPARTMENT IN THE AREAS OF PRODUCT MANAGEMENT, R&D, SALES, SERVICE AND MARKETING.

Sabine Schweinschwaller
Head of Market Research at PAI FINGER

about the latest crane-related innovations and pass on customer feedback.

'The feedback both from our studies and our one-on-one discussions provide us with crucial information. The findings are always evaluated and discussed at the highest level by the heads of department in the areas of product management, R&D, sales, service and marketing,' says Sabine Schweinschwaller, Head of Market Research at PALFINGER. 'From these sessions, we derive an extensive package of measures, which we then implement together with our dealers.'

The study participants also have something to gain from giving their feedback because they are entered into a random prize draw for the chance to win a visit to PALFINGER's Brand World in Salzburg, where they can see for themselves why it's always best to choose PALFINGER.

Every company needs loyal customers — and PALFINGER measures loyalty using the 'Customer Loyalty' matrix.

Of course, another central question in our customer studies is: 'What will the future bring?' PALFINGER's customer surveys naturally focus on a lot more than just the loader crane itself and address the vehicle as a whole.



10 YEARS OF MARKET RESEARCH AT PALFINGER Pioneer in B2B

- 4 employees
- 15–20 studies per year
- 150 surveys to date
- 15–30% response rate
- Trend research and market requirements
- Market KPIs and development
- Creation of Market Intelligence Platform: countries, competition, development, segments

1. The winners visit PALFINGER's Brand World.

2. Daniel Bösch, Barbara Vitzthum, Johanna Jakob-Stadlbauer, Sabine Schweinschwaller

E5107



3:

PALFINGER CRANES ON THE JOB: ON THE ROAD IN GERMANY AND FINLAND

THE MOST POWERFUL CRANE ON NORDERNEY

Builders on this tiny East Frisian island in the North Sea have a lot to contend with. The salt-laced air means that corrosion protection for the entire vehicle is especially important, while the 8.5-tonne weight limit is yet another challenge.

Kranbetrieb Norderney GbR operates the island's only trailer vehicle equipped with a PALFINGER PK 34002 SH. On Norderney, no vehicle is allowed to measure more than 8.5 metres in length or weigh more than 8.5 tonnes. Only in exceptional cases — for example, emergency management — does the administrative district issue special permits in consultation with the municipality of Norderney. A special permit was issued for this unique trailer because it can be used instead of much heavier units such as construction or truck-mounted cranes that would place excessive strain on the roadways.

'Another challenge inherent in this project involved protecting the undercarriage against corrosion. The air on Norderney is very salty – after a storm, for example, you can see a white layer of salt residue on windows all over the island,' says Alexander Tirre of Tirre Cranes, the local PALFINGER sales partner. The PK 34002 SH and its six-fold extension and fly jib are already very well protected against corrosion: prior to assembly, all steel

components are jet-blasted, primed, KTL-coated and painted. The steel construction of the undercarriage is completely galvanised and, as a tandem four-wheeler with crane superstructure and accessories, weighs just 10.5 tonnes. Two ballast weights — also galvanised — weighing 1,400 kg each are also used if necessary. The overall concept is rounded off by a cable winch, assistance systems such as automatic Synchronised Rope Control (SRC) and safety systems such as transport monitoring. Complete with all this equipment, it is the biggest and most powerful crane vehicle stationed on Norderney.

'Everything is optimised in line with our needs. And thanks to personal protection mode, we can also use the equipment as a fall



EVERYTHING IS OPTIMISED IN LINE WITH OUR NEEDS. AND THANKS TO FALL PROTECTION MODE, WE CAN ALSO USE THE EQUIPMENT AS A FALL PROTECTION SYSTEM FOR PERSONNEL. THIS CRANE CONCEPT IS THE RESULT OF ALL THE EXPERIENCE WE GAINED WITH OUR LOADER CRANES AND THE CRANE PERFORMANCE REQUIREMENTS PLACED ON US.

Steffen Onnen Managing director of Kranbetrieb Norderney protection system for personnel. This crane concept is the result of all the experience we gained with our loader cranes and the crane performance requirements placed on us,' says managing director Steffen Onnen. His company offers a comprehensive range of services including the handling of shipping containers

and cubicles, the assembly of prefabricated construction elements, houses and concrete parts and all the usual loading and unloading tasks associated with everyday island life. The range of services also includes transportation, demolition and general construction work.



SMALL, BUT POWERFUL THE PC 2700

When it comes to loader cranes, the motto is usually: 'the bigger, the better'. But not in this case: the PC 2700 is one of the smallest models in PALFINGER's portfolio of loader cranes. For the Finnish branch of VOLVO CE, this crane plays a truly special role. The PC 2700 is part of an ingeniously designed service truck.

Large, heavy-duty construction equipment requires correspondingly large service tools and spare parts. To ensure that this huge machinery can be properly maintained and that the required equipment can be unloaded from the service vehicle quickly, easily and safely, the PC 2700 is mounted on the rear-left end, well protected in the vehicle interior. The innovative design gives the crane a wide slewing angle, making life much easier for service technicians.

Nine service vehicles have gone into operation in the last twelve months, and the next ones are already being prepared. We will have to wait and see whether the concept currently employed in Finland can be rolled out globally at VOLVO CE. But as far as the Finnish market is concerned, the service truck is a tremendous success.



A GLOBAL PLAYER PALFINGER IS SET-TING STANDARDS



As an innovative provider of premium lifting solutions, PALFINGER offers a wide range of customer-specific options and features. In particular, PALFINGER is committed to providing professional customer support – before, during and after a purchase. And the local general representatives with their sales and service networks are the most important customer interfaces here.

A few years ago, PALFINGER set up a dedicated network development team responsible for formulating, introducing and monitoring PALFINGER standards in the sales and service networks. 'Our primary goal is to provide our general representatives and their networks with the best possible support in the ongoing expansion of their networks with a view to ensuring optimum sales and service support over the long term,' says Karl Neumayer, Head of Sales & Service Network Development at PALFINGER. This requires the continuous optimisation and enhancement of processes, systems and services, which we achieve by maintaining a constant dialogue with our general representatives and working together to monitor market trends.

GETTING BETTER TOGETHER

The 'PALFINGER Standards' are more than just a collection of documents and theoretical processes — active dialogue with our sales and service partners ensures market proximity, a practical orientation and, in

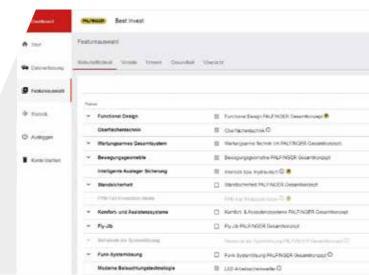
turn, viable measures. As part of the evaluation processes, we together come up with suggestions for improvement aimed at promoting the continued expansion of the network.

Over the past few years, the PALFINGER network development team has integrated more than 500 partners and general representatives in the evaluation process. These experiences gained within Europe and all the resulting measures are currently being transferred to South America and Russia to improve the quality of the networks in these regions, too. This is how PALFINGER takes its commitment to lifetime excellence to a whole new level and makes the daily working life of its customers even more efficient and more successful.



BEST INVEST

PALFINGER loader cranes represent LIFETIME EXCELLENCE — cost-effectiveness, reliability and innovation over the entire service life of the crane. Best Invest uses facts and figures to demonstrate why it's worth investing in a PALFINGER loader crane.



OIL MONITORING

Would you like to increase the oil change interval to three years — without risk?

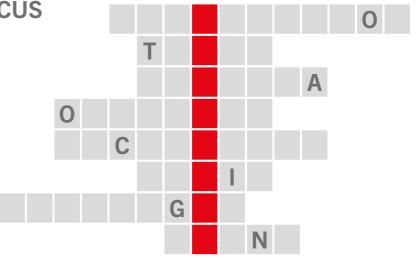
Now you can thanks to our new oil maintenance concept.



PALFINGER WORD PUZZLE



WE ALWAYS FOCUS ON THE ...





KP-CRANEP19+EN PALFINGER.COM