

# PASSION

PALFINGER CRANE MAGAZINE

# 17



## DIGITALIZATION

Virtual and augmented reality

## TELEMATICS

Individual solutions for increased efficiency

## INNOVATIVE

Expansion of the TEC range



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# EDITORIAL



## DEAR PARTNERS AND FRIENDS OF PALFINGER!

It is a great honour to be able to welcome you to this issue as the new CEO of the PALFINGER Group. For me, it's important that we as a company are close to our customers, so I want to use this opportunity to communicate with you openly and directly.

After year upon year of strong growth via a number of company acquisitions, my management team and I are now laying the foundations for a future in which our customers can source efficient, tailor-made solutions and services from a single source.

Your experiences with our products will also contribute to the ultimate success of this shared development process. With this in mind, I'd like to invite you to send my team your feedback, so that we can work together to optimise our products and make them even more efficient for you and to bring us both closer to our common goal: Being even more successful in our markets!

Digitalization is the hot topic of the moment. There is no area of life that remains untouched by this global trend. For us at PALFINGER, digitalization is an important topic – it opens doors to new products and services that generate real added value for our customers. Ultimately, these new developments will enable us to develop more efficient, economical and safer lifting solutions. The added value we create for our customers is the only benchmark that matters to us.

Our telematics solutions – Fleet Monitor and Operator Monitor – are digital tools that help our customers save time and money in fleet management, job planning and construction site applications.

To make your day-to-day working life easier, our LIFETIME SERVICE guarantees comprehensive advice, expert service and rapid support over the entire life cycle of the product. Thanks to our reliable long-term partners across the world, we have built up a strong service network that our customers can rely on.

In 2019, we plan to add a number of new models to our TEC range. The first two to launch – the PK 37.002 TEC 7 and the PK 35.002 TEC 5 – will be unveiled at this year's IAA Commercial Vehicles. Visitors to our stand will also get a chance to explore the latest innovations of the PALFINGER digitalization program NEXCELLENCE, which are designed to significantly boost efficiency. One of these innovations is the new digital feature Smart Eye, which is a practical remote solution integrated into a pair of glasses worn by the user. The display and camera connect the technician to a service expert, allowing the user to obtain live support while keeping their hands free to work on the task.

In this issue of PASSION, we'll also give you a preview of the innovations and developments that our team is currently working on. Get inspired and ensure you've got the edge over your competitors! If you have any comments or questions, please do not hesitate to get in touch with us.

Best wishes from Bergheim,

**Andreas Klauser**  
(CEO)



# PALFINGER CONNECTED

Downtime costs money on construction sites. When large cranes are deployed on complex construction contracts, it can be a challenge when these key pieces of machinery are taken out of action by unexpected maintenance work – but two new telematics solutions from PALFINGER help to prevent these kinds of unplanned stoppages. Fleet Monitor is a special platform that uses digital intelligence to support

fleet managers and site managers; Operator Monitor is a digital tool in the form of a practical app that enables crane operators to work more efficiently. Both solutions provide the user with all of the key information they need at a glance, and monitor all crane activity, connect-

ing the fleet and enabling the user to access all relevant application data.

“The larger the crane and the more complex the application, the more expensive each hour of work is”, says Thomas Schwaiger, Senior Director of Sales and Marketing, explaining the reasons behind PALFINGER’s decision to focus on the development of special telematics solutions for PALFINGER cranes in recent months: “These new developments enable us to provide our customers with digital tools that boost their efficiency and productivity”. Using the networked data, customers can plan maintenance and service work more effectively and rectify faults faster.

Fleet Monitor provides the fleet manager with an overview of all technical data and operating conditions for individ-

ual vehicles, crane models and the fleet as a whole. The telematics solution is a useful maintenance and service management tool that enables the user to check the operating times and monitor the safety of the fleet. The platform shows which machines are in use and where, and how long they have been operating for. The job planning module allows site managers to plan tasks more efficiently and economically. The system enables them to optimise crane use and loading processes to the highest degree of precision. Fleet Monitor also provides an overview of servicing dates and upcoming maintenance work for every crane in the fleet, enabling operations to be planned down to the finest detail – and preventing avoidable downtime. When an online error message appears, the fleet manager can immediately access information on what action to take and how the fault affects the rest of the operation. In a matter of seconds, he can determine whether the crane operator can rectify the problem, or whether the vehicle needs repairing by a service partner – which saves time and makes the manager’s day-to-day working life that little bit easier.

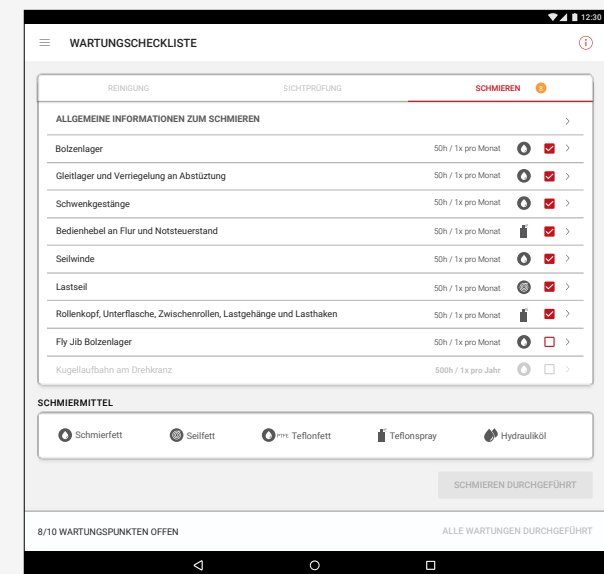
Maintenance checklists are also a key feature of the Operator Monitor. The app supports the crane driver, helping him to operate the crane efficiently, safely and smoothly. The operator gets a notification on his mobile phone when maintenance work needs to be carried out on a particular crane, accompanied by the relevant instructions to complete the task – which enables him to plan jobs such as lubrication of sliding elements and visual inspections with greater efficiency. The crane operator can view upcoming service dates and plan for the scheduled downtime in ad-

vance. The app shows the operator the precise status of the crane at any point in time, and provides comprehensive information – in video, text and image format – on all of the individual functions of PALFINGER loader cranes. When an error message appears, the platform guides the operator through the repair process. There’s no need to flick through the instruction manual; all of the information required is within easy reach on the display. The machine also shows the nearest service workshops and their contact information.

With the stability control tool, the crane operator is able to calculate the possibilities of the operation in advance, directly on site. There’s one other similarity between the new solutions: They are both designed around the needs and interests of fleet managers and crane operators.

“Digitalization allows us to build a connected crane network and provide users with key operating data in real time. Our new solutions make the entire fleet more cost-effective”, says Schwaiger, explaining how Fleet Monitor and Operator Monitor add significant value in practical use.

Thomas Schwaiger, Senior Director of Sales and Marketing





# IMPRESSIVE DIGITAL CRANE EXPERIENCE

In the new PALFINGER VR Crane Simulator, the operator can take the controls of a simulated PK 135.002 TEC 7 with PALcom P7 technology in real time – to explore the machine or learn how to use it.

PALcom P7 radio remote control technology, a set of the latest generation of VR glasses, a laptop and a little bit of space: This is all that's required to experience how it feels to be at the controls of the new PK 135.002 TEC 7.

The new PALFINGER VR Crane Simulator PK 135.002 TEC 7 creates a virtual experience on the construction site that is almost indistinguishable from the real thing. With the digital tools at your fingertips, lifting, slewing and lowering manoeuvres feel just like they would behind the controls of the latest PALFINGER model – complete with realistic sound effects. The virtual scenery reflects a realistic building site setting:

The PK 135.002 TEC 7 is fitted on a four-axle truck positioned in front of a multi-storey building on which construction work is ongoing. The operator's task is to lift a range of loads onto the building roof or the vehicle's load area. If you're looking for a challenge, you can also test out the sensitivity of the crane controls and try your hand at lifting a load into the building. The P-Fold assistance function can also be put to the test. The user can switch perspectives, opting for a view from next to the truck or looking over the site from above.

"With the PALFINGER VR Crane Simulator, the user can immediately get a feel for the crane and see how its functions and options work in a real-life scenario", says Stefan Seidl, Manager of Trade Marketing for EMEA, explaining the advantages that advances in digitalization bring to sales teams. However, the crane simulator is much more than just a valuable sales tool in presentations and negotiations. The virtual crane control system is also a great way to train future operators of the new PK 135.002 TEC 7, helping employees to get to grips with the machine quicker and saving time and money.

The PALFINGER VR Crane Simulator PK 135.002 TEC 7 is compact and easy to set up. The full set – complete with VR glasses, PALcom P7 radio remote control system and a laptop – is supplied in a handy carry case. The PALFINGER VR Crane Simulator PK 135.002 TEC 7 can be hired or purchased for use in presentations or at customer events.



# AUGMENTED REALITY – ALL INFO IN ONE APP

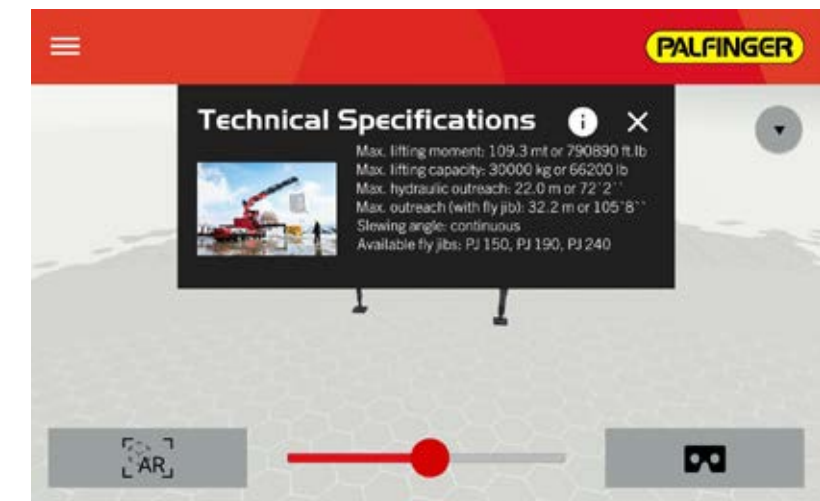
The new PALFINGER XR APP ticks all the boxes: It combines a realistic moving 3D model, videos, images and text to provide an impressive and fascinating overview of the features of the PK 135.002 TEC 7.

The latest development by the creative marketing team in the Cranes division puts the world of the PK 135.002 TEC 7 at your fingertips. The PALFINGER XR APP offers a comprehensive

digital overview of all data, functions and applications of the loader crane for interested customers and dealers. The app, which includes augmented reality technology to give users a new level of insight into the crane, uses 3D animations, brief videos, images and text to impart information, summarising all of the features of the PK 135.002 TEC 7 in a compact and engaging way. Simply scan the XR marker with your mobile phone or press the start button in the main menu of the app, and it will produce a realistic three-dimensional model of the crane, which moves in line with the selected functions.

The app acts as a modern digital "brochure" to provide valuable information to potential customers. It can be downloaded onto any common mobile end device from the Google Play Store and the Apple App Store.

For the IAA, the new Epsilon Q17Z and the PS T 14 TEC skiploader have also been added to the app. The app is a great tool for presenting more detailed information on each vehicle and the various benefits of each model in a clear, varied and engaging way. Customers can use the app to gain a better understanding of each model, learn how features such as HPSC and P-Fold work with 3D animations, and explore each model for themselves – whenever and wherever they want.





# NEW MODELS IN THE TEC RANGE

In 2019, the TEC range will be expanded with the addition of new models in the 30–40 metre-tonne class. The first two models are set to make their world debut at this year's IAA. Like all of the cranes in the TEC range, the new models not only boast a lightweight steel construction, but also come with innovative assistance systems and a range of different equipment lines, transforming them into truly intelligent machines for modern construction sites.

the PK 35.002 TEC 5, which is equipped with a rack and pinion slewing system.

As is the case with all of the TEC range cranes, the new models are based on the teardrop-shaped P-profile. The innovative design results in a lightweight yet very rigid boom system, which maximises performance while also reducing the weight of the machine.

However, the truly unique feature of the TEC range is the wide range of intelligent systems inside the machines – including P-Fold, MEXT and WEIGH. The TEC 7 equipment line provides access to all available PALFINGER comfort and assistance systems. It also allows the customer to select further options such as HPSC-Plus or DPS-C, systems that PALFINGER has launched as part of its digitalization drive to make the crane operator's job more comfortable and more efficient.

The new models in the TEC range combine the advantages of a heavy-duty crane with those of medium metre-tonne class vehicles. The first new model to be unveiled is the PK 37.002 TEC 7, which offers besides a wide range of options, a continuous slewing system. This system provides unrestricted freedom of movement; the crane slews via the shortest route for faster unloading. The second model to be showcased at the IAA is

HPSC-Plus offers three modules with which the HPSC (high-performance stability control) system can be expanded. In addition to a fully variable stabiliser position, the system can also take other factors into account, for example by detecting the load status or the level of stabilising force. Even if the vehicle is not fully stabilised, the crane makes maximum use of the working area, achieving maximum lifting capacity at each point in the stability curve. DPS-C also helps to maximise lifting power on the fly jib, enabling the crane to realise exceptional lifting power in all positions.

The new MEXT and WEIGH systems significantly increase the efficiency of the application: MEXT allows one or even two mechanical extensions to be detected and monitored by the crane's sensors, and integrated in the overload protection system. In spite of the long reach of PALFINGER TEC cranes, further mechanical extensions on the fly jib may be useful or necessary in some applications. Depending on whether one or two mechanical extensions are in use, MEXT adjusts the crane's performance to the maximum load capacity of the extension.

WEIGH allows crane operators to weigh the load directly on the crane, thereby getting an overview of the positions which can be reached – for an even greater degree of precision in crane operation. WEIGH also saves the last ten weighing operations automatically.





# THE NEW GENERATION OF PALTRONIC

The SLD range first came into being in 2015 with the launch of the PK 17.001 SLD and the PK 19.001 SLD. Thanks to the excellent price-performance ratio, the crane models became best sellers immediately.

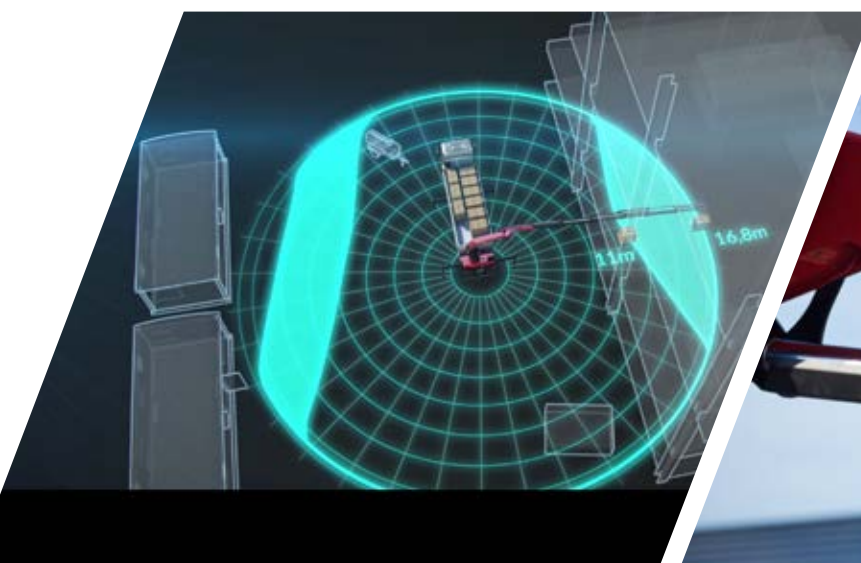
PALFINGER has now decided to take this range to the next level and is launching additional assistance systems on SLD cranes as part of the redevelopment of the PALTRONIC.

The electronic control system on PALFINGER cranes is often referred to as "the brain of the crane". The latest generation of the system now includes additional functions for the SLD range, designed to increase reach using load detection, maximise performance and boost operator comfort during slewing operations. In the new generation of the PALTRONIC system, PALFINGER has developed a simple basic model which is designed for use in a wide range of applications. The system can also be expanded with numerous additional technical features. SLD range cranes are now better equipped for the task at hand than ever before, with functions that fit their specific application and requirements profile to make customers' working lives easier.

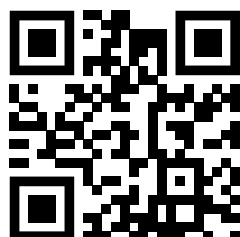
The HPSC-Plus LOAD module indirectly records the load status of a truck using an inclination measuring device, and

enables the machine to respond accordingly in real time. The system adjusts the maximum load limit depending on the tilt angle to suit the individual situation. The heavier the load on the loading platform, the larger the gain in reach. The module has already established itself as a well-known and successful assistance system for heavy-duty cranes. This new innovation will benefit many different sectors: HPSC-Plus LOAD in SLD cranes will make countless applications simpler, safer and more efficient.

The automatic, electronic A-HPLS boosts performance by 12 to 13 percent. Crane operators benefit from more comfortable operation without needing to activate the system manually, as this is done by PALTRONIC automatically. The new soft-stop slewing function brings the slewing process to a gentle halt just before the end stop is reached. Other new features include the WOPT optical warning lights, which replace the conventional horn to signal a critical overload, and the Cabin Protection System Light, which protects the truck cab from damage caused by inaccurate slewing movements.



DISCOVER THE HPSC-PLUS LOAD SYSTEM:



# CRANES IN OPEN-PIT MINING

A new truck designed for heavy-duty applications in open-pit mining, supplied by Bernt Fahrzeugbau GmbH, has been equipped with a PALFINGER PK 48002 EH and hookloader, installed on a Tatra Phoenix chassis. The operator of the new vehicle is Wasel, a company based in Bergheim.

Bergheim-based crane and heavy-duty loading company Wasel provides a range of services to the open-pit mining

industry in the Rhine region. This is an industry that works around the clock – so its trucks and their equipment have to be able to cope with a variety of applications, covering everything from acting as an auxiliary crane or a recovery vehicle to general day-to-day logistics. The 8x8 Tatra chassis features a unique central tube frame with independent suspension. The specially designed, extra-wide tyres keep ground pressure low, while a tyre pressure control system increases traction even on the most challenging surfaces. Superstructure building company Bernt designed the vehicle body, including the auxiliary frame. The family company, which was founded in 1963, has been a PALFINGER service and sales partner for 35 years. The company added a PALFINGER PK 48002 EH crane with radio remote control and a rope winch and a P24A power hookloader with radio control to the truck chassis. The cable sets and charging equipment on board of the truck keep the radio control batteries charged, ensuring maximum availability of the operating units. The loader crane, with a maximum lifting capacity of 18.3 tonnes, and the 24-tonne P24A hookloader are both designed for heavy-duty applications. The vehicle is an essential tool for a wide range of logistics processes in the open-pit mine. It transports the heavy-duty wheels used on the kilometres of conveyor belt in the mine, as well as motors, pumps, machine components and much more.





# FIRST PK 165.002 TEC 7 IN THE NETHERLANDS

In December 2017, the first PK 165.002 TEC 7 sold in the Netherlands, was delivered to Jos Tolkamp Speciaal Transport.

Owner Jos Tolkamp, started his company in the year 2000 with a PALFINGER PK 66000 D, mounted on a 4 axle DAF truck. Directly from the start, the company expanded rapidly. Today Jos Tolkamp Transport owns an impressively wide range of 25 trucks, 10 of which are provided with mainly PALFINGER loader cranes.

A close collaboration between Jos Tolkamp Transport, the regional PALFINGER dealer LAKO and the Dutch manufacturer of special heavy duty trucks GINAF made this mounting concept possible. The 5 axle GINAF truck has 4 steering axes with air suspension on both front axes and hydraulic suspension on the three rear axes. LAKO developed a special sub frame including a tailor-made loading platform, which is hydraulically extendable up to a length of 8 meters.

Owner Jos Tolkamp, started his company in the year 2000 with a PALFINGER PK 66000 D, mounted on a 4 axle DAF truck.

In addition to the reinforced truck chassis, a front stabilizer construction with 25 tons loading capacity enables the operator to rely on full lifting capacity at a working area of 360°. Assistance systems like P-Fold, AOS and FPM as well as a 3.5 ton rope winch with SRC and RTC, complete the package. With a gross vehicle weight of 50 tons and a dead weight of as low as 38 tons, a load capacity of 12 tons remains. All in all, this makes a perfect work tool.



# OPENING OF GOTRADE DUBAI – THE NEW PALFINGER SITE IN THE UNITED ARAB EMIRATES

Last month, a ceremony was held to celebrate the official opening of the new branch of GOTRADE in Dubai.

In the presence of Chairman of the Supervisory Board Hubert Palfinger Junior and Gorica Group CEO Ivan Fornaz- aric, the new sales and superstructure centre was unveiled to customers and guests for the first time.

The 600 m² site will exclusively showcase PALFINGER loader cranes, Epsilon, tail lifts, access platforms and hookloaders.

The new spare parts centre and hydraulic centre guar- antee exceptional service for customers. The site has a total of 12 assembly stations for installing truck super- structures and performing maintenance work for the UAE market.



# PALFINGER'S DENMARK SITE IS GROWING

PALFINGER's Denmark team has moved into new offices. The building offers 749 m² of space, 368 m² of which is currently occupied by offices – but the space will all be needed in the near future, as the 11-strong team at the main site in Middelfart continues to grow. The Nordic PALFINGER site is the world's leading exporter of the PK 200002L SH. With a long-arm design and hydraulic lifting height of almost 49 metres, the loader crane is primarily designed for applications requiring a long reach. In Denmark, 15 loader cranes from this range are already in use; 14 of these were supplied by PALFINGER's Denmark site.





# LIFETIME SERVICE FOR SUCCESSFUL CUSTOMERS

PALFINGER stands for innovative approaches, long-lasting products and expert service. The perfect combination of high-quality product solutions and reliable support is what sets the global market leader in lifting solutions apart from its competitors.

With LIFETIME SERVICE, PALFINGER offers its customers comprehensive advice, service and support over the entire life cycle of their product. This service starts in product development and manufacture, and continues through assembly and commissioning, with maintenance and servicing and into the product's second life, until it finally requires replacement.

LIFETIME SERVICE is an integrated service network that strengthens reliability and reinforces our partnership with the customer. "We feel a sense of responsibility towards our customers and towards PALFINGER products throughout the duration of our business relationship, and our service promise is driven by that sense of responsibility", explains Balthasar Gwechenberger, Vice President of Corporate Service.

PALFINGER's crane division alone has over 100 employees working to deliver this promise as part of its service team, under the guidance of experienced PALFINGER managers.

The PALFINGER service promise is based on three key pillars:

1. An unrivalled, close-knit service network, in which high-quality partners play an important role
2. Lifelong, rapid availability of PALFINGER original spare parts
3. A range of solutions, services and digital features that ensure that PALFINGER service partners can quickly access the knowledge they require and that are designed to make their work easier

All of PALFINGER's decisions are made with the interests of customers in mind. With strong long-term partners in virtually all European countries, PALFINGER delivers optimum service.

PALFINGER has summarised the quality and service standards provided to all customers in its Partner Standards, and has been working with its partners for five years to further develop these standards.

**"We don't leave anything to chance – we set high standards for ourselves and for our service partners, and we ensure that these standards are met by maintaining lasting, sustainable partnerships. This approach means that our customers, service partners and we at PALFINGER will enjoy long-term success".**

Karl Neumayer, Head of Sales and Service Network Development



**"Our customers rely on us being able to provide expert assistance anywhere, at any time. And rightly so!"**

Balthasar Gwechenberger,  
Vice President of Corporate Service

As the customer's day-to-day operations and financial performance are directly connected to product availability, PALFINGER always looks for product solutions that improve support, boost efficiency and improve safety standards. The PALFINGER University (PalU) provides all of the training that service technicians need. The information, documentation and wide range of digital service tools provided helps them to deliver a professional service.

**"The overall quality of a premium product or manufacturer is most evident in its professional and fast handling of complaints or repairs. Our job in the customer services team is to do everything we can to offer our customers the best possible solution".**

Franz Mayr, Head of Customer Services, Cranes division

PALFINGER is always looking for ways to make customers' day-to-day working lives easier – and then developing innovative digital features to make this happen. The PALcode mobile app is specifically designed to improve support provision: With just a swipe, the customer can find their nearest service partner. PALremote assists with remote diagnostics, and Smart Eye helps technicians to visualise the task at hand.



The PALdesk platform connects the customer, the PALFINGER product, the carrier vehicle, the service partner and the service technician. It provides technical details and information in real time, allowing the customer to access support on-location.

However, expert service also means solving problems before they arise. With this in mind, our skilled PALFINGER teams adopt a proactive approach. They are already developing the solutions of the future today – creating innovative, service-orientated products, technologies and offers.



**"At PALFINGER, service is a topic that is close to our hearts. We know how important it is for our customers that their machines are reliable and available for them to use. And we all enjoy what we do. Because our products are as important to us as they are to our customers".**

Simon Altmann,  
Director of After Sales Service EMEA



**“Customers don’t need a solution for every problem; they need a solution to their problem”.**

Martin Waldhutter, Head of Customer Service, PALFINGER Germany

PALFINGER combines all of the expertise required to deliver successful products that tick all the boxes. Every customer is unique, with their own individual requirements,

so PALFINGER does not rely on standard solutions – instead, we develop the right solution to suit each customer and their individual situation. This is the common goal uniting our close-knit network of partners, who understand PALFINGER products and their digital features. Close communication between PALFINGER and its partners is a key factor in delivering a competent, reliable service: The latest product solutions and developments at PALFINGER, along with requests, requirements and potential issues reported by customers, are always on the agenda, enabling us to adapt our portfolio of solutions at any time to suit the ever-changing needs of our customers.

With a continuous service supply chain and a full-coverage, multilevel logistics system, PALFINGER original spare parts can be delivered quickly and easily. To maintain this level of service, the central warehouse in Lengau, Austria, doubled its storage capacity and invested in a modern, partially automated warehousing system at the end of 2017. This new system enables the warehouse to retrieve spare parts rapidly and forward them on to partners or directly to workshops.

**“For me, only one thing matters: Getting PALFINGER original spare parts to our customers as quickly as possible!”**

Christian Steiner,  
Head of Spare Parts EMEA



# SMART EYE

SMART EYE supports mobile service technicians working off-site and customers who use highly complex PALFINGER products and understand the technology behind them. This convenient remote solution has been integrated into a pair of glasses with live WLAN image transmission. This technology allows the technician to communicate with a service expert in real time via the display and obtain live, on-camera support.

While the technician talks with the expert, he has his hands free to work on the equipment. The support tool provides a rapid overview of a situation and enables the user to obtain immediate assistance so that he can proceed with the task in a safe way.

SMART EYE is PALFINGER’s service solution for the digital age. In challenging situations, the “data glasses” are an important service tool and a unique remote solution.

## SMART EYE AT A GLANCE

### Smart Eye is comprised of:

- Helmet
- HMT-1
- Mobile router without SIM
- Headphones
- Case

### Smart Eye is:

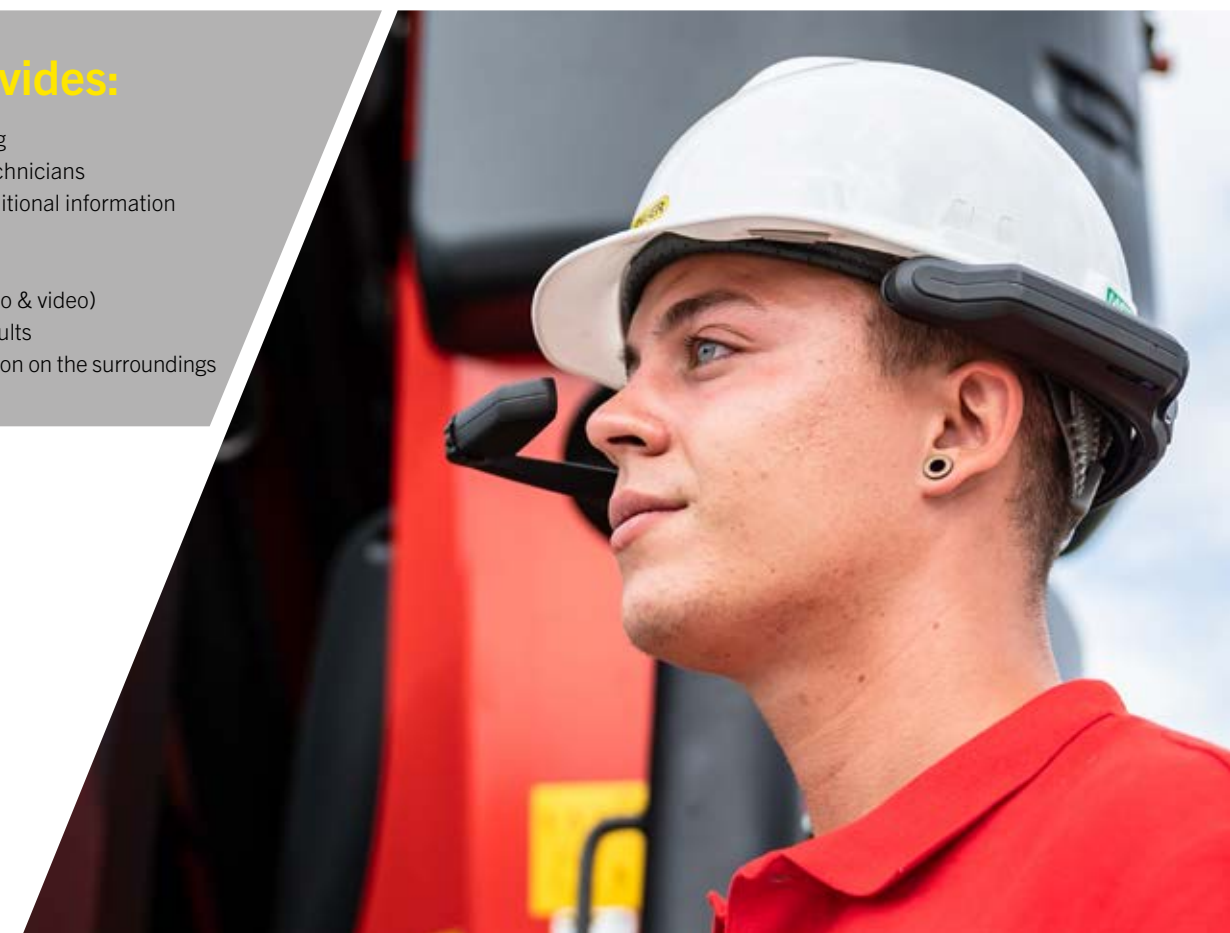
- Robust – for use on any construction site
- Hands-free
- Connected (WIFI, Bluetooth)
- Safe – thanks to use of helmet and safety glasses

### Smart Eye features:

- Display for an overview of the system at a glance
- Camera for high-resolution photos and real-time video chat
- Intuitive voice control
- Speaker – integrated and safe
- Powerful batteries for long-lasting performance

### Smart Eye provides:

- 100% hands-free working
- Assistance for service technicians
- Immediate access to additional information
- Help with navigation
- Help during training
- Permanent support (audio & video)
- A visual explanation of faults
- An ability to add information on the surroundings





# PALDRIVE: THE ONLINE MARKET FOR TURNKEY VEHICLES

PALFINGER has gone live with PALdrive, a new online marketplace for its dealers and customers.

“Our aim for this platform is to provide our dealers with another sales channel – accessible via PC, tablet or smartphone – for complete vehicles. We provide the online interface. The content and the range of turnkey solutions or complete vehicles on the platform is determined by our dealers”, explains EMEA Sales Manager Thomas Schwaiger. The platform enables dealers to market their new vehicles and demo and training trucks to a larger target audience.

Potential customers can access the new online database directly via [www.palfinger.com/paldrive](http://www.palfinger.com/paldrive). Markus Absmanner, PALdrive and OEM Manager, believes that the platform’s main advantages lie in the rapid availability of vehicles and in the risk-free sales process, which is managed by local PALFINGER dealers. And there’s another

key benefit for customers: “There is no need to go through a complex ordering and project planning process – the vehicles are in stock and ready to go”, says Absmanner.

**EVERYTHING FROM A SINGLE SOURCE**  
The PALdrive online database lists new vehicles as well as demo machines and quality-checked used equipment. Customers can submit an enquiry via the contact form; the details are then passed on to the responsible PALFINGER dealer. This dealer is the customer’s primary contact from this initial enquiry through to delivery of the vehicle. Potential customers can browse the product categories or select vehicles based on specific criteria. They can also use a “full-text search” to find listings containing certain terms such as specific truck or crane models.

In addition to product type (loader crane, hookloader, TMF, etc.), the user can filter the results on a number of other criteria:

TRUCK BRAND
EMISSION CLASS
INSTALLATION TYPE
GROSS VEHICLE WEIGHT (GVW)
WHEEL FORMULA



# CONNECTED SOLUTIONS: PALFINGER IS TEAMING UP WITH DANFOSS POWER SOLUTIONS

Danfoss Power Solutions, a long-term partner of PALFINGER has become a strategic partner when it comes to telematics and connected end-to-end solutions for PALFINGER products.

Danfoss Power Solutions – a world-class provider of mobile hydraulics for the material handling, construction, agriculture and other off-highway vehicle markets – is a segment of the Danfoss Group who engineers energy efficient technologies that empower smart communities and industries.

Throughout its eighty-year history, Danfoss Power Solutions pioneered the hydrostatic transmission, as well as orbital motors and steering units. They were the first to introduce load-sensing proportional valves, and the first to control them electronically. Today, seamless integration of electronics and hydraulics result in total machine management. For over a decade, Palfinger and Danfoss Power Solutions have partnered to offer the latest innovations to customers with the best quality and reliability. As such “Danfoss has been a reliable as well as valuable business partner for many years now. We are therefore pleased to have found the perfect strategic partner in Danfoss Power Solutions, enabling us to further develop the connected solutions at PALFINGER” says Martin Zehnder, President Land at PALFINGER AG.

**CONNECTING CRANES DIGITALLY**  
The latest project that Danfoss Power Solutions and PALFINGER are working on, is the new connected solution being integrated into over 3 thousand PALFINGER cranes during the coming years. In a first step, the focus will be on implementing the new, fourth-generation Danfoss telematics unit on selected crane models. But mid- and long-term telematics solutions will be available for all PALFINGER products.  
The new Danfoss Power Solutions connectivity solution will provide PALFINGER’s customers with the data they need to make informed business decisions using a global, state-of-the-art, secure communication infrastructure to transmit data to the cloud.

Henrik V. Jørgensen, President, Controls Division at Danfoss Power Solutions states that “this is a new way of building cranes and a new way of doing business enabled by our solution, so we’re really happy about enabling PALFINGER to offer this technology.”

Specifically, the telematics solution will enable customers to simplify which data they need, and how to use it, to boost efficiency and product lifespan, minimize downtime, report equipment location, use and condition, and much more.

**STRATEGIC PARTNERSHIP**  
This is an important step for both companies. Therefore, Martin Zehnder (President Land, PAG) and Henrik V. Jørgensen (President Controls Division, Danfoss Power Solutions) in March of this year signed a Memorandum of Understanding at Danfoss headquarters in Nordborg, Denmark.  
For Danfoss, “PALFINGER has been a valued long-term partner in the area of PVG valves, and has always been seen as a very innovative and quality-minded customer. As such, Danfoss is honored to have PALFINGER as one of the first partners on the next generation of Danfoss Connectivity Solutions” says Henrik V. Jørgensen.





# PK 135.002 TEC 7 IN USE AT PROMMEGGER SEILBAHNEN

Prommegger Seilbahnen GmbH is putting the PK 135.002 TEC 7 through its paces.

Prommegger Seilbahnen GmbH, based in Dorfgastein in Austria, is a company that skilfully combines years of experience with innovative

ideas and cutting-edge technology. Over the years, the company has established itself as a leading supplier of transport and assembly solutions designed for difficult terrain. As well as constructing goods cable lifts, the company also installs and maintains flood lights and suspension bridges. One of the team's trusted tools is the PALFINGER loader crane, which is installed on a truck and boasts a long range to provide access to even the most difficult-to-reach locations. In addition to the PK 72000, the company added the new PK 135.002 TEC 7 to its fleet at the start of 2018. As one of the selected lead users, Prommegger was able to acquire the new model before its range release, and test the machine in day-to-day use. This approach ensures that customer needs can be identified and fed back to development to further enhance the product. The PK 135.002 TEC 7 has now been deployed full-time at Prommegger, and was used during the construction of the new cable lift in Bad Gastein – having been delivered to the site by train.

Equipped with a fly jib, cable winch and various assistance systems, the machine is the perfect partner for the high-precision assembly work that the Prommegger team complete on a daily basis.

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# PK 135.002 TEC 7 PRODUCT PRESENTATION IN MADRID

Can PALFINGER cranes dance the Flamenco now too?

This was just one of the things that attendees of the three-day PALFINGER EMEA Sales Conference found themselves pondering during the extraordinary demonstration of the PK 135.002 TEC 7 in the former Posta Real bull-fighting arena in Madrid. Over 140 PALFINGER customers from Europe, South Africa, Australia and the Middle East came together for the meeting in June. Hubert Palfinger and Andreas Klauser used the conference as an opportunity to tell guests more about the latest innovations at PALFINGER and the company's strategy for the future. The organisers also impressed their visitors with a unique product presentation:

Accompanied by a dynamic dance troupe, a digital Flamencosound track and spectacular LED effects, the PK 135.002 TEC 7 became the star of the show. In the arena, the heavy-duty crane showed off previously unseen talents, moving rhythmically in time with the music and the visual animations.

In spite of its captivating performance in front of the crowds, the PK 135.002 TEC 7 is destined to take centre-stage primarily on construction sites. The heavy-duty crane specialises in heavy loads and long-range tasks, and was designed for installation on trucks with a payload. Its diverse range of applications includes everything from heavy-duty jobs through to intricate installation work. The PALFINGER crane boasts an outstanding power to weight ratio: Although it weighs around 2000 kilograms less than its predecessor, it boasts up to 35% more lifting power. The PK 135.002 TEC 7 features three different fly jibs – the PJ 240, PJ 190 and PJ 150 – enabling it to cope with a variety of long-range lifting tasks. Tried-and-tested assistance systems complete the package, enabling greater efficiency in fly jib operation: P-Fold folds and unfolds the crane arm at the touch of a button, DPS-C increases the lifting power on the fly job exponentially, and HPSC-Plus optimises stability control.

Customers at the event were not only able to learn about the company's innovative systems and digital developments, but got the opportunity to see them in action in PALFINGER's new products. The TEC 7 model is compatible with all optional comfort and assistance systems.

# 21 PALFINGER LOADER CRANES FOR DISASTER CONTROL AND EMERGENCY MANAGEMENT IN TURKEY

The Turkish disaster control and emergency management organisation AFAD Ankara recently took delivery of the first of 21 new emergency vehicles at BAIS Makina in Ankara. The remaining vehicles included in this major order placed with PALFINGER's general representative will be shipped to Turkey where they will assist in disaster control and emergency management throughout the country.

The flexibility of the knuckle boom cranes combined with tried-and-trusted PALFINGER quality proved essential in AFAD's decision to place this major order. In combination with the wide range of equipment on offer, the PK 11.001 SLD 3 from the medium crane range is a real all-rounder for a diverse array of applications.

## READY FOR ACTION IN CRITICAL SITUATIONS

The MAN TGS33.500 6x4 trucks, which are equipped with PK 11.001 SLD 3 cranes, will be deployed all over Turkey to support search and rescue operations. The diverse and complex disaster control and emergency management operations place huge demands on man and machine. Maximum flexibility and reliability are of the essence because such operations frequently take place under extremely challenging conditions. The vehicles are capable of operating even in extremely confined spaces – an essential advantage for rescue operations.







## Developing **innovative** solutions for the world's complex challenges, together. That's **Engineering Tomorrow.**

At Danfoss, we work every day to develop disruptive designs that will keep your business at the forefront of our ever-changing industry.

We are committed to helping you build a better future. Our innovation is defined not only by our world-class mobile hydraulic solutions, but also by the reliable partnerships we are proud to share with our customers. Regardless of the application or unique challenges you face, you can depend on Danfoss to help you maximize efficiencies, reduce total machine costs and grow your success.

With a commitment to partnership and an eye on the future, Danfoss is Engineering Tomorrow.

[www.danfoss.com](http://www.danfoss.com)