EFFICIENT
New SOLID series models

INNOVATIVE
From development to the analysis centre

RELIABLE
The Mounting Competence Centre

PALFINGER CRANE MAGAZINE

PALFINGER WORLD
MARVEL, LEARN, DISCOVER
DEAR PARTNERS AND FRIENDS OF PALFINGER!

Six new models in the Solid series, long-term surface protection with powder coating and the new online shop – these are just a few examples of the innovations we are presenting in this issue of Crane Passion. As a company, we are constantly developing ourselves and our product range to help our customers work more effectively, efficiently and at a faster pace.

Innovations – the main focus of this issue of Crane Passion – do not happen by themselves. They require a hugely committed and strong team, which is open to new ideas. This openness is a common thread that runs through all areas of PALFINGER. All our departments are constantly working on innovations to make our cranes even lighter, more effective and more flexible.

Here, it is not only our expertise that is important but also state-of-the-art technology. In the analysis centre, for example, we are working using VR glasses. Using a design drawing, these glasses give us a glimpse into the future, thereby helping to perfect the development process. We are proud of the analysis centre, which has developed over the past few years and become an indispensable part of our commitment to quality.

The fact that we are on the right path with this commitment to quality and our speed of innovation is also demonstrated by our positive economic development. In 2016, we continued with our growth trajectory and achieved record sales and results. This is also a good basis for new ideas and concepts.

One of our most recent projects is PALFINGER WORLD, which has been opened at our factory in Lengau, near Salzburg. At this exciting exhibition, the roots of our company are combined with state-of-the-art communication and experience technology. I encourage you to visit PALFINGER WORLD. You will have a lot of fun and come away with some of the passion for lifting solutions, which drives us to achieve new standards every day.

Herbert Ortner
(CEO)
Simple lifting tasks do not require specialist equipment – they need a reliable all-rounder. In practice, the SOLID series has earned itself a reputation among local authorities, road maintenance crews and horticultural businesses thanks to its excellent price-performance ratio. With cranes of 13 or 14 tonne metres, PALFINGER has bridged the gap and completed the SOLID series. This simple and robust series now has appropriate models to cover the entire range from 5 to 19 tonne metres. “These cranes have been specifically designed for simple loading tasks. What counts here is the lifting capacity, reliability and reasonable price”, says product manager Michael Völker, describing the benefits for customers.

The new models have the same dead weight as their predecessors but offer greater lifting capacity. The special feature of this series is Single Link Plus – a knuckle boom that can extend backwards by 15°, available for 12 mt models and above. Single Link Plus extends the working range of the crane and makes it possible to lift heavy loads even when there is limited space or in difficult conditions.

The conventional extension boom system with up to five hydraulic extensions offers versatility and good reach. For example, the PK 14.501 SLD 5 can achieve a maximum hydraulic reach of 14.8 metres. The High Speed Extension that comes as standard on PALFINGER cranes increases the boom system extension speed by up to 30 percent. Both PK 13.501 SLD 3 and PK 14.501 SLD 5 models are also available as K models. The short knuckle boom, which characterises these versions, provides an ideal hook height for moving heavy loads when space is limited. For the first time, the PK 14.501K SLD 5 is equipped with HPLS. This means that, if the worst comes to the worst, the lifting capacity can be increased – a practical turbo effect where heavy loads are concerned.

There are three different stabiliser controls available for the new PK 13.501 SLD 3, PK 13.501K SLD 3 and PK 14.501 SLD 5 crane models. As well as the basic variant ISC-S, customers can also choose HPSC-L for 360° stability with predefined stabiliser positions or the innovative HPSC-E variant with fully variable stabiliser positions. The principle that runs through the entire range also applies to these new models – full performance at a reasonable price.

Depending on the application areas, the customer can select between several versions. NON-CE variants include the basic version SLD 1 without overload protection as well as the SLD 3 with Paltronic manual control and M-HPLS to boost lifting power. The NON-CE and CE variants also include the SLD 3 with Paltronic overload protection and manual control, and the SLDS with Paltronic, E-HPLS, radio remote control and LS control valve.

Another advantage is that all SOLID models receive a cathodic dip painting (CDP). This ensures premium quality long-life surface protection.

PALFINGER has expanded the popular SOLID series with six new models. Cranes between 5 and 19 tonne metres ensure a wide range of applications.

Simple lifting tasks do not require specialist equipment – they need a reliable all-rounder. In practice, the SOLID series has earned itself a reputation among local authorities, road maintenance crews and horticultural businesses thanks to its excellent price-performance ratio. With cranes of 13 or 14 tonne metres, PALFINGER has bridged the gap and completed the SOLID series. This simple and robust series now has appropriate models to cover the entire range from 5 to 19 tonne metres. “These cranes have been specifically designed for simple loading tasks. What counts here is the lifting capacity, reliability and reasonable price”, says product manager Michael Völker, describing the benefits for customers.

The new models have the same dead weight as their predecessors but offer greater lifting capacity. The special feature of this series is Single Link Plus – a knuckle boom that can extend backwards by 15°, available for 12 mt models and above. Single Link Plus extends the working range of the crane and makes it possible to lift heavy loads even when there is limited space or in difficult conditions.

The conventional extension boom system with up to five hydraulic extensions offers versatility and good reach. For example, the PK 14.501 SLD 5 can achieve a maximum hydraulic reach of 14.8 metres. The High Speed Extension that comes as standard on PALFINGER cranes increases the boom system extension speed by up to 30 percent.

Both PK 13.501 SLD 3 and PK 14.501 SLD 5 models are also available as K models. The short knuckle boom, which characterises these versions, provides an ideal hook height for moving heavy loads when space is limited. For the first time, the PK 14.501K SLD 5 is equipped with HPLS. This means that, if the worst comes to the worst, the lifting capacity can be increased – a practical turbo effect where heavy loads are concerned.

There are three different stabiliser controls available for the new PK 13.501 SLD 3, PK 13.501K SLD 3 and PK 14.501 SLD 5 crane models. As well as the basic variant ISC-S, customers can also choose HPSC-L for 360° stability with predefined stabiliser positions or the innovative HPSC-E variant with fully variable stabiliser positions. The principle that runs through the entire range also applies to these new models – full performance at a reasonable price.

Depending on the application areas, the customer can select between several versions. NON-CE variants include the basic version SLD 1 without overload protection as well as the SLD 3 with Paltronic manual control and M-HPLS to boost lifting power. The NON-CE and CE variants also include the SLD 3 with Paltronic overload protection and manual control, and the SLDS with Paltronic, E-HPLS, radio remote control and LS control valve.

Another advantage is that all SOLID models receive a cathodic dip painting (CDP). This ensures premium quality long-life surface protection.

PALFINGER has expanded the popular SOLID series with six new models. Cranes between 5 and 19 tonne metres ensure a wide range of applications.

Simple lifting tasks do not require specialist equipment – they need a reliable all-rounder. In practice, the SOLID series has earned itself a reputation among local authorities, road maintenance crews and horticultural businesses thanks to its excellent price-performance ratio. With cranes of 13 or 14 tonne metres, PALFINGER has bridged the gap and completed the SOLID series. This simple and robust series now has appropriate models to cover the entire range from 5 to 19 tonne metres. “These cranes have been specifically designed for simple loading tasks. What counts here is the lifting capacity, reliability and reasonable price”, says product manager Michael Völker, describing the benefits for customers.

The new models have the same dead weight as their predecessors but offer greater lifting capacity. The special feature of this series is Single Link Plus – a knuckle boom that can extend backwards by 15°, available for 12 mt models and above. Single Link Plus extends the working range of the crane and makes it possible to lift heavy loads even when there is limited space or in difficult conditions.

The conventional extension boom system with up to five hydraulic extensions offers versatility and good reach. For example, the PK 14.501 SLD 5 can achieve a maximum hydraulic reach of 14.8 metres. The High Speed Extension that comes as standard on PALFINGER cranes increases the boom system extension speed by up to 30 percent.

Both PK 13.501 SLD 3 and PK 14.501 SLD 5 models are also available as K models. The short knuckle boom, which characterises these versions, provides an ideal hook height for moving heavy loads when space is limited. For the first time, the PK 14.501K SLD 5 is equipped with HPLS. This means that, if the worst comes to the worst, the lifting capacity can be increased – a practical turbo effect where heavy loads are concerned.

There are three different stabiliser controls available for the new PK 13.501 SLD 3, PK 13.501K SLD 3 and PK 14.501 SLD 5 crane models. As well as the basic variant ISC-S, customers can also choose HPSC-L for 360° stability with predefined stabiliser positions or the innovative HPSC-E variant with fully variable stabiliser positions. The principle that runs through the entire range also applies to these new models – full performance at a reasonable price.

Depending on the application areas, the customer can select between several versions. NON-CE variants include the basic version SLD 1 without overload protection as well as the SLD 3 with Paltronic manual control and M-HPLS to boost lifting power. The NON-CE and CE variants also include the SLD 3 with Paltronic overload protection and manual control, and the SLDS with Paltronic, E-HPLS, radio remote control and LS control valve.

Another advantage is that all SOLID models receive a cathodic dip painting (CDP). This ensures premium quality long-life surface protection.

FAN SHOP

PALFINGER has expanded the popular SOLID series with six new models. Cranes between 5 and 19 tonne metres ensure a wide range of applications.

Simple lifting tasks do not require specialist equipment – they need a reliable all-rounder. In practice, the SOLID series has earned itself a reputation among local authorities, road maintenance crews and horticultural businesses thanks to its excellent price-performance ratio. With cranes of 13 or 14 tonne metres, PALFINGER has bridged the gap and completed the SOLID series. This simple and robust series now has appropriate models to cover the entire range from 5 to 19 tonne metres. “These cranes have been specifically designed for simple loading tasks. What counts here is the lifting capacity, reliability and reasonable price”, says product manager Michael Völker, describing the benefits for customers.

The new models have the same dead weight as their predecessors but offer greater lifting capacity. The special feature of this series is Single Link Plus – a knuckle boom that can extend backwards by 15°, available for 12 mt models and above. Single Link Plus extends the working range of the crane and makes it possible to lift heavy loads even when there is limited space or in difficult conditions.

The conventional extension boom system with up to five hydraulic extensions offers versatility and good reach. For example, the PK 14.501 SLD 5 can achieve a maximum hydraulic reach of 14.8 metres. The High Speed Extension that comes as standard on PALFINGER cranes increases the boom system extension speed by up to 30 percent.

Both PK 13.501 SLD 3 and PK 14.501 SLD 5 models are also available as K models. The short knuckle boom, which characterises these versions, provides an ideal hook height for moving heavy loads when space is limited. For the first time, the PK 14.501K SLD 5 is equipped with HPLS. This means that, if the worst comes to the worst, the lifting capacity can be increased – a practical turbo effect where heavy loads are concerned.

There are three different stabiliser controls available for the new PK 13.501 SLD 3, PK 13.501K SLD 3 and PK 14.501 SLD 5 crane models. As well as the basic variant ISC-S, customers can also choose HPSC-L for 360° stability with predefined stabiliser positions or the innovative HPSC-E variant with fully variable stabiliser positions. The principle that runs through the entire range also applies to these new models – full performance at a reasonable price.

Depending on the application areas, the customer can select between several versions. NON-CE variants include the basic version SLD 1 without overload protection as well as the SLD 3 with Paltronic manual control and M-HPLS to boost lifting power. The NON-CE and CE variants also include the SLD 3 with Paltronic overload protection and manual control, and the SLDS with Paltronic, E-HPLS, radio remote control and LS control valve.

Another advantage is that all SOLID models receive a cathodic dip painting (CDP). This ensures premium quality long-life surface protection.
“Even though the participants were fully focused on both days, there was an amicable and cheerful atmosphere. I am delighted with the concepts that the participants have developed and particularly impressed by the fact that they were ready for presentation after only two days.”

“Hackathon” is a portmanteau of the words “hack” and “marathon” and describes a forum for the joint development of innovative concepts for hardware and software. The PALFINGER hackathon, which was organized in cooperation with the IT consulting firm Tieto, took place in Vienna at the headquarters of Microsoft Austria.

With more than 100 participants, this hackathon was the largest to be held in Austria to date — and its magnitude was also quite impressive on an international scale. The participants came from all over Austria and also included teams from abroad. They were free to present their ideas either in German or in English. While some participants had already registered as teams, individual applicants formed their teams on site. The hackathon was attended by students from universities of technology, universities of economics and business, and universities of applied sciences, as well as by young start-ups. During the two-day event, support was provided by around 30 coaches, representing various areas of the PALFINGER and Tieto companies, who provided information and shared practical tips with the participants.

PALFINGER had challenged the participants to come up with ideas for four subject areas:

- Virtual reality, augmented reality, mixed reality
- Semi-automated loading and unloading
- Digital assistance systems
- PALFINGER as a service

In their introductory statements given at the venue, the representatives of PALFINGER, Tieto and Microsoft highlighted the importance of these technologies and data for the overarching objective of creating added value for customers. Topics such as automation and sharing concepts as well as the necessary connectivity — of products, data and, first and foremost, ideas — were discussed. Martin Zehnder, for instance, explained: “It is not the individual things that are of relevance, but rather what we can do with the data we obtain from the Internet of things”.

Following the introduction, the 24 teams started to work on their ideas, and several of them continued until the late evening when the premises closed on the first day. On Sunday, the “hacking” continued, and the PALFINGER coaches provided advice. The teams had the opportunity to perform pre-pitches to prepare for their demonstrations before the jury, which were scheduled for the late afternoon.

Each team was given a maximum of two minutes to present its ideas. The various presentations included videos, practical simulations and first prototypes. The jury evaluated the presented ideas based on their impact on business, their concreteness, originality, conception and user friendliness, as well as on the presentation of results.

The top three teams won money prizes and were given the opportunity to further develop their ideas together with PALFINGER. “The three winning teams impressed us on all levels. We are looking forward to bringing their ideas and their spirit to the PALFINGER Group. And it goes without saying that we will also take another close look at all other concepts presented,” commented a jury spokesperson when asked about the outcome.

A special award was presented to the two youngest rookie teams — students from two technical secondary schools: HTL Donaustadt in Vienna and HTL Bregenz.

PALFINGER has been focusing intensively on digitalization and the opportunities and changes it engenders for quite some time now. In 2016, the Company set up an internal organizational unit which concentrates on these topics. Parallel to this, first projects were implemented, and technologies such as automation, virtual and augmented reality or 3D printing are already in use for certain purposes.

Herbert Ortner, CEO of PALFINGER AG, emphasized the importance of this type of innovation. “Our aim is to establish this open form of innovation at PALFINGER — using external talents, but also making use of internal resources to promote this and create the necessary structures.” PALFINGER plans to establish a branch in Vienna in 2017, where a resourceful team will be engaged in developing new ideas and partnerships. Through the increasing use of digital technologies, PALFINGER will open up completely new aspects of customer benefit.
Elaborate tests and experiments in the modern analysis centre in Lengau are part of PALFINGER’s commitment to quality. They are also part of the innovation process of the crane manufacturer.

The experiment is hard to miss – when a steel sample in the tensile testing machine is pulled apart until it breaks, the snapping sound it makes causes everybody in the vicinity to flinch, despite the soundproofing. Loads of up to almost 25 tonnes are applied to the steel sample during the test. The tensile testing machine is a special piece of equipment, which is used at PALFINGER’s modern analysis centre in Lengau to investigate the mechanical properties of material samples for future cranes. “We cooperate closely with sales, the development department and production”, says Franz Wirnsperger, head of the analysis centre. Ultimately, it is an issue of safety – of whether the basic material for the components of the crane exhibits the properties required for safe operation even when submitted to heavy loads, extreme temperatures or prolonged use.

The reason for building the in-house analysis centre is simple: “We work quickly and extremely flexibly and we specialise both in international and PALFINGER standards”, explains Wirnsperger, who over the past few years has worked together with Bernhard Eicher to develop the analysis centre. Another advantage compared with an external laboratory is that the in-house analysis centre can work closely with all departments – from development to manufacturing. Innovations and improvements are constantly worked on as a team. “We pay a great deal of attention to the details, allowing us to make a significant contribution to efficient production as early as the development phase”, says Wirnsperger.

A lot of elements are needed to manufacture high-strength steel in the furnace – iron ore, carbon, manganese, silicon, molybdenum, chromium, nickel, titanium, vanadium, aluminium, boron and copper. Testing the properties of the steel sheets is as complex as the list of ingredients for these special alloys. The technicians inspect in detail the strength, brittleness and uniformity of the sheets used for the cranes. Another crucial point is the weldability of the sheets.

From the outside, a welded seam can look perfect. “But, how strong the bond really is can only be seen by taking a look inside”, explains the head of the analysis centre. Wirnsperger is a trained welding engineer and he is responsible for taking this look inside. His fascination lies in the detail. Minute inclusions, pores or a lack of fusion are all weld defects that have to be detected. Considering the loads that a crane has to endure on a daily basis, these defects could have fatal consequences. Perfect welding is therefore one of the most important production steps in the manufacturing process.

Macrossections of individual components are tested in the hardness testing machine. The material must demonstrate the same strength before and after welding. The test is used to determine the effects of the amount of heat energy applied during welding – the energy input per unit length – on the individual joining areas of the bond. In collaboration with production, new steel alloys can be welded with different energy inputs per unit length. The effects on the individual bonding zones are analysed and evaluated using hardness tests. Continuous random tests are also performed during series production to monitor and constantly improve the uniform bonding quality.

Deformation tests performed to monitor the deformation of a material are also part of the analysis centre’s repertoire as well as impact testing, which determines whether the steel sheet is resistant to brittle fractures at extremely low temperatures. After all, the cranes from PALFINGER are also used in countries where it can be very cold. Impact testing is carried out at test temperatures as low as minus 70°C. Thanks to this important test machine, the analysis centre in Lengau is a leader in the global PALFINGER Group and can perform checks for other factories.

Another special piece of equipment in the analysis laboratory are the VR glasses. “They allow us to analyse the future”, says Eicher, getting to the heart of the matter. The VR glasses are used to visualise three-dimensional models of a crane that is still under construction. Working together with the developers of a new model, the VR glasses are used to analyse in detail where difficulties may arise when welding parts, or in different process steps. As a result, we can recognise whether there are any locations that are difficult for the welding torch to access, so that optimisations can be implemented as early as the development phase. This cooperation between the development department and the analysis centre makes subsequent manufacturing easier and increases the process reliability of series production.

In the future, VR glasses will also be installed at other factories to take the possibilities of communication to the next level with regard to innovation.

The analysis centre is also always on hand if changes are made to the production process, for example, if new steel sheets are purchased. The purchasing department provides the specialists in the analysis centre with the data sheets and descriptions of the steel in question. To be approved for a nine-month test phase, a test sample delivery must then pass all visual, mechanical and technological checks.

If a material does not pass one of the tests, the manufacturer can be informed which aspects do not meet the high standards of PALFINGER and, if need be, what could be changed. “The analyses provide both us and the suppliers with valuable information for further development”, says Wirnsperger.

The lab and its expertise is not only for the Lengau factory – it is available to all PALFINGER locations across the world and also carries out work for external customers. The range of services includes destructive and non-destructive material testing as well as surface technology and residual dirt analysis for hydraulic systems. With its extensive expertise, the analysis centre is a key element of PALFINGER’s commitment to quality.
INNOVATION AS A CONTINUOUS PROCESS

Just because something works well as it is, does not mean that there are no better alternatives. For years, looking at tried-and-tested products in a new light and calling them into question has been a driver of innovation. This is how the new P-Profile came about for the extension boom system of the load boom. At PALFINGER, innovation is a continuous process.

When it comes to the knuckle boom and extension booms of PALFINGER’s new TEC crane series, no stone has been left untumed. From a purely visual point of view, the P-Profile really catches the eye. The new polygonal profile increases the load boom’s stability, making the overall design of the crane lighter. In practice, the profile enables extremely precise and fast movements, which saves both time and money. The “father” of this innovative P-Profile is Eckhard Wimmer, head of pre-development and calculations in the loader crane area of the research and development department at PALFINGER. He called into question the long-established hexagonal profile and looked for other possibilities. “Sometimes you have to take things that have worked well for years, consider them from a different perspective and question whether a different solution would be more suitable”, says Wimmer, referring to one of the major triggers of innovation. Innovations also arise from the courage to follow new paths. The driver behind an innovation is often the requirement of our customers or new ideas. They inspire developers to come up with new and creative solutions. Modifying the profile brought about some major advantages, including the increased stability and reduced weight of the boom systems and the crane.

There is often a long time between an idea and a marketable product. Redesigning the load booms took more than five years. The modified profile also entailed new extension cylinders and low maintenance extension system. The prototypes had to pass an extensive field test before they could be considered for series production. Now, the P-Profile has been implemented for six models of the TEC series. “Our colleagues involved in production at Lengau also contributed significantly to the success”, adds Wimmer. Future series production required bending and welding technologies to be refined. Similarly, devices and tools for the new components had to be acquired. Creativity is not the only requirement for innovations. Today, state-of-the-art technology is the basis for new developments and is indispensable for those working on new ideas. For instance, when performing calculations for new developments, designers at PALFINGER cooperate closely with the Technical University of Munich. Through this cooperation, an existing computer programme developed for crane calculations has been expanded to also perform calculations for loader cranes. This programme can be used to computationally simulate the deformations of a loader crane under load. Calculations can be used to pre-emptively analyse the behaviour of a crane in great detail. “In the ideal situation, we would perform a practical test and end up with the same geometry as we did in the theoretical calculation”, explains Wimmer. He adds: “We are already very close to the actual situation”. These are perfect conditions for the development teams of the crane manufacturer.

WIN ONE OF THREE PALFINGER PK 200002 L SH MODELS.

Simply answer the following question: In what scale are PALFINGER crane models produced? Send us your answer with the subject line “Crane Passion – competition” by 31 August 2017 to branding@palfinger.com

See www.palfinger.com/en/microsite/fansite/Pages/raffle for terms and conditions.
How does it feel to reach dizzying heights in the basket of an access platform? Can I win against a hydraulic system with my own muscle power? How skilful am I at controlling a truck loader crane with an original Palcom P 7?

At PALFINGER WORLD – the new experience and information centre from the lifting solutions specialist – visitors can enjoy immersing themselves in the diverse brand world of PALFINGER. The world of technology has never been so exciting and inspiring!

The interactive exhibit was designed in collaboration with Ars Electronica Solutions. It is housed in a newly built hall at the Lengau factory and offers a number of extraordinary experiences accompanied by state-of-the-art light, sound and presentation technology. Across three floors, customers, dealers and business partners can explore the passion and innovativeness that characterise the Salzburg-based manufacturer of lifting solutions. The modern building also houses the new handover and delivery centre of the MCC (Mounting Competence Centre).

Visitors are led straight to the exhibit, after being greeted by the tour guide. Lighting effects increase the excitement, with everything shrouded in darkness except the area currently being viewed, which is put in the spotlight. At the beginning, visitors can learn about the history of the family company and its development. Then, they get straight into the action, with a large 3D cinema bringing PALFINGER products to life. Viewed through 3D glasses, the unique combination of wall and floor projections create an incomparable sense of space. The visitors are in the midst of it all – standing by when a huge spruce is felled in the forest in Styria and transported by an Epsilon crane. They are on a speedboat involved in rescuing a diver. They gaze on in wonder as a PK 165.002 TEC 7 lifts one of its ancient predecessors, a PALFINGER loader crane manufactured in 1969, onto the roof of PALFINGER WORLD as if it were as light as a feather. The impressive images of the uses of PALFINGER products give a sense of what “Lifetime Excellence” means in practice.

Continued on page 14
The next section of the exhibit uses large rotating screens to introduce the people behind the PALFINGER brand. This includes HR Manager Luciane Moreira from Brazil as well as CEO Herbert Ortner and Head of Software Development Henrik Bingl. They explain their own personal career paths at PALFINGER as well as their tasks and development opportunities. Incidentally, visitors can also discover a lot about the presence of the crane manufacturer across the world and the varied career and training opportunities offered by the company.

Then comes the best bit – the chance to play and get some hands-on experience. The PALFINGER product world in miniature is the uncontested highlight. Fully functional vehicles at a scale of 1:14 can be controlled using a PALcom P7 or from the original Epsilon driving seat. Visitors can lift tree trunks onto a truck or unload pallets at a construction site – all using toy-sized products, which nevertheless have all the functions of their life-sized counterparts.

Ever been in the basket of an access platform? The rather exciting feeling of swaying many metres above the ground is incomparable – as is the virtual panoramic view of Salzburg!

The media table invites visitors to enter the product world of the crane manufacturer, they simply have to select an icon to find out more... Here, a highlight is the three-dimensional design drawings of cranes, truck-mounted forklifts and rescue boats, which can be zoomed in, zoomed out and rotated. This allows visitors to really see all the details. The fun continues at the technical stations, where even visitors with the biggest muscles will not stand a chance in a showdown with the hydraulics.

After a quick trip to the PALFINGER shop, visitors who wish to join a factory tour are led to the production hall. The new passage leads visitors, with the tour guide, directly into the crane manufacturer’s apprenticeship training centre. Make a booking for this unique experience at PALFINGER WORLD by ringing +43 662 2281 81302. We look forward to seeing you!
The new delivery hall provides a professional setting for the handover to its customers of complete products built at the factory from PALFINGER. It has enough room for presentation, acceptance and training.

On the day of the handover, the new vehicle is perfectly over by the PALFINGER Mounting Competence Centre (MCC) team. Over the past few months, the crane manufacturer has constructed a new hall at the Lengau factory to provide a fitting environment for handing over products to its customers. As well as the handover area, the hall also houses PALFINGER WORLD.

“It is always a special moment when truck-mounted cranes, hookloaders, loaders and tail lifts are handed over by the PALFINGER Mounting Competence Centre (MCC) team. Over the past few months, the crane manufacturer has constructed a new hall at the Lengau factory to provide a fitting environment for handing over products to its customers. As well as the handover area, the hall also houses PALFINGER WORLD.

“The moment when customers stand in front of their new crane vehicle is always exciting”, explains Gernot Pichorner, head of the MCC, which was established three years ago. With this new delivery hall, PALFINGER has created the ideal conditions to make this first impression a great experience for customers.

On the day of the handover, the new vehicle is perfectly presented in the spacious delivery hall. Every screw, every hook, every part is meticulously checked and all the paint work is polished. Before customers pull up in their reserved parking space, the MCC team meticulously checks every function of the vehicle one last time. For heavy-duty cranes, such as the PK 200002 L SH or the PK 165.002 TEC 7, completely mounting the crane on the carrier vehicle takes between eight and twelve weeks — depending on the design. Handing over the crane to the customer is therefore an emotional moment for the team as well, who have dedicated several weeks of their passion and expertise to mounting it on the vehicle.

All the formalities of the handover and the theoretical training can be completed in a modern meeting room before going to the hall for practical training. Depending on the model, this training can last between half a day and two days. “It is important to us that customers leave with the feeling that they have a good understanding of their new crane. They should be very familiar with the functions and the possible applications”, says Pichorner. This time spent on intensive training is well invested. During operation, it helps customers fully utilise the potential of the crane, save time and work efficiently even in difficult transport situations.

The entire crane handover experience is rounded off by a circuit of the new PALFINGER WORLD and a factory tour. “We want to use these visits to the factory to allow customers to experience PALFINGER’s philosophy and commitment to quality. For us, this also forms part of a successful and long-standing relationship”, explains Pichorner. “We offer this complete package to all our dealers. The handover day is a good opportunity to delve deeper into the world of PALFINGER.

For every mounting project, the handover also signals the end of an intensive process for the MCC. Mounting the crane and its associated components, such as the auxiliary frame between the truck and the crane, is a central element. It is a key factor for the subsequent performance of the system as a whole. Ultimately, the truck and crane together are an optimized overall concept. Completely mounting the cranes at the factory means that everything comes from a single source. The MCC can make use of all the manufacturing capabilities of the production location and therefore minimise mounting time. In the process, particular attention is paid to the weight optimisation of the overall system.

The MCC is also heavily involved in product development at PALFINGER. As an example, the PK 165.002 TEC 7 is customised for a total weight of 32 tonnes. To prove that this really would work, the loader crane was already mounted on a truck in the development phase. In doing so, this meant that special attention was paid to the performance of the equipment as a matter of course. The MCC was also responsible for the development of an assembly kit for front supports as well as the mounting concept and the new anti-twist protection for the L crane series.

The global dealer and partner network benefits from the experience of the MCC and attaches great importance to the transfer of its knowledge. The MCC team supports dealers and partners in mounting projects and help optimise processes, working on useful components and overall solutions for mounting. One example is the standard kit package for mounting the PC 1500 on a VW T6.

“Up to now, our complete vehicles have been supplied to 34 different countries. There are different standards and regulations everywhere”, says Pichorner, naming one reason why the extensive knowledge of the MCC is so valuable. As in the development of commercial vehicles, digitalisation is playing an increasingly significant role and emissions standards are becoming stricter, meaning that the interface between truck and crane will become even more important in the future. Standardised mounting solutions and complete concepts are one way for the MCC to respond to and play an active part in this development.

THE MCC IN FIGURES:
- 15 mounting stations
- 45 employees
- Over 3,500 square metres of production space
- Capacity for around 250 mounting projects per year
The haulage company Spedition Fürmetz from Bavaria is once again relying on PALFINGER to expand its fleet. Over the past few months, a total of 10 PK 20.501L TEC 3 long-boom brick and block cranes have been mounted in the MCC and supplied to the renowned family company.

The new loader crane enhances the fleet of the Bavarian haulage company, which has already relied on cranes from Salzburg for many years. In total, the company has 96 Scania and Volvo trucks, which are almost all equipped with PALFINGER cranes. More than 60 PK 18001 L long-boom cranes are on the road transporting bricks, roof tiles and paving stones. A PK 23002 SH is used for the general transport of construction materials. The fleet is rounded off by a PK 27002 SH with fly jib – ideal for dry construction transport logistics, a PK 26002 EH with eight hydraulic extensions and several truck-mounted forklifts.

Over time, a friendly relationship has developed between the Fürmetz family and PALFINGER. “We speak the same language”, says Fürmetz. The Fürmetz family is now in its fourth generation and the children are growing up in the digital age. The proud father is already excited about what solutions PALFINGER is developing in this field.

Fürmetz was among the first customers to receive their new cranes in the new delivery hall. It is a nice backdrop for the conclusion of months of close cooperation with the Mounting Competence Centre team in Lengau. “For us, it is important that everything comes from one source and that the connection between truck and crane achieves optimum performance”, says Fürmetz, referring to the order processing and mounting. “We have come to greatly appreciate the MCC team. They communicated with us as equals from the word go.”

The haulage company Spedition Fürmetz from the district of Erding in Bavaria and specializing in the transport of building materials, has already worked with loader cranes from PALFINGER for a long time. One reason for this long-term cooperation is that, thanks to the PALFINGER branch in Munich, the family company has a reliable, local contact partner at its disposal. Fürmetz has greatly expanded its fleet over the past months. Over the coming weeks, PALFINGER will hand over the newest generation of long-boom brick and block cranes mounted on eight Scania trucks and two Volvo trucks to the Bavarian company. “PALFINGER products are very popular among our drivers. We are very happy with the performance, reliability and service”, emphasises Anton Fürmetz, CEO of the family company. The Bavarian company has now decided on the PK 20.501L TEC 3 model. “Our drivers often have to move pallets of paving stones that weigh up to 1,800 kg. The PK 20.501L TEC 3 does this easily”, says Fürmetz, the third generation of the family at the head of the company, explaining this decision. He was impressed by the power and high payload of this model. The ergonomics of the top seat as well as the control, high working speed, stability of the P-Profile and excellent reliability thanks to the maintenance free extension boom system and the swivel bearing in an oil bath were other crucial factors for the purchase decision.

The family company founded in 1948 specialises in construction materials logistics. The company is based in Taufkirchen in the Bavarian district of Erding. The company has a wide range of vehicles and cranes to meet all customer requirements. All trucks are fitted with environmentally friendly Euro 5 and Euro 6 engines.
There is one reason why PALFINGER cranes still look perfect even after years of heavy use – the surface protection is a key sign of quality of the premium manufacturer’s products.

The basis for this surface protection is good preparation of the surface to be painted. To achieve the best end result, before painting, the crane parts are sandblasted and cleaned, after which zinc phosphate – which is also commonly used in the automotive industry – is applied as the substrate for the KTL coating.

After the components have passed through the fully automated KTL coating process stages, a painting robot applies a topcoat of a water-based, environmentally friendly, two-component conductive lacquer coat for the special parts and colours. All crane components, e.g. from large-scale production, and in both standard colours are coated in the new powder coating facility. After the KTL process, individual crane components are not submitted to further treatment and are installed on the crane directly.

Powder coating is an electrostatic process in which an electrically conductive material is coated with powder paint. In the process, high voltage electrostatic guns are used to create an electrically charged powder cloud. The charged powder particles adhere to the workpiece surface and form the powder coating layer. In the subsequent curing process, the workpieces are heated to approximately 160°C. This creates a hard-wearing coating layer with uniform distribution.

Environmental protection has also been taken into account. The facility has an energy recovery system and therefore contributes to reducing energy consumption. The powder coating process itself is solvent-free and an efficient application method. Efficient application means that excess colour powder is collected and reused in the powder system.

TOP QUALITY SURFACE PROTECTION AT A GLANCE:

- High application efficiency
- High mechanical durability
- Highest standard of quality
- Extensive experience
- High deformation without chipping
- Environmentally friendly water-based painting technology
Invercargill is the southernmost city in New Zealand and the home of Mark Purdue and his truck haulage company Purdue Bros Ltd. His latest acquisition for his fleet is a four-axle DAF (CF85), which is equipped with a PK 42002 SH with PALCOM radio remote control.

During a service visit to New Zealand, Balthasar Gwechenberger (Head of Corporate Services at PALFINGER), Mario Penn (Service Manager at PALFINGER Australia), Grant Capper (Service Manager at PALFINGER New Zealand) and Gary Stoad (Head of Sales for the Southland Region) took the opportunity to deliver the new PALCOM radio remote control – the first of its kind in New Zealand – to Mark Purdue.

Purdue Bros Ltd., one of the most renowned transport companies in the Southland region has operated since 1941. Its customer base extends from the port town of Bluff via Invercargill to the more rural areas of the region, which is why the company needs to offer a range of different services. This means that Purdue is always on the lookout for innovative transport solutions.

Over the years, the haulage company has earned the reputation of meeting its service promise even in the most difficult situations and challenging local conditions. According to Mark Purdue, constant investments in the fleet and specialising in loader crane technology are essential for the growth of the company.

The company currently has a fleet of eleven trucks, nine of which are equipped with PALFINGER cranes (PK 72002, PK 65002, PK 42002 SH, PK 40002 EH, PK 23002 SH, PK 44002, PK 36002 and PK 16502).

“We purchased our first PALFINGER crane – the PK 21000 – in 1995. This was the beginning of a partnership between Purdue Bros Ltd, Gough Group and PALFINGER”, recalls Purdue.

“We offer services for a range of different industries and companies in southern New Zealand. We have to be innovative due to the nature of many jobs and we are therefore constantly on the lookout for sound solutions for our customers. Products from PALFINGER play a key role in helping us meet these requirements”, he adds.

Mark Purdue’s father, John Purdue, originally sold his share of the company to Bill Richardson, the owner of the HWR Group – one of the biggest transport groups in New Zealand with a total of 50 haulage companies. Mark Purdue began training as a diesel engine mechanic at his father’s company in 1989. Now he is in charge of Purdue Bros.

“Do you know what, I love these cranes! If need be, I sometimes lend a hand myself and check that everything is OK. Just as I have learned from my training with PALFINGER over the years”, he says with a smile. He concludes: “We are very happy with the products from PALFINGER as well as our relationship with PALFINGER and the Gough Group (PALFINGER’s sales partner in New Zealand). We are convinced that, with these products as a foundation, we have a great future ahead of us”.

Mark Purdue Purdue Bros Ltd.