## **WOLFFKRAN**

# WOLFFNews



If the tower crane's control electronics suddenly fail during use, the brakes malfunction, or if problems arise during reeving, then you need quick and easy help. Wolffkran's response to this is WOLFF Assist, the digital remote maintenance system — hands-free and voice-controlled using smart glasses. Debuting at bauma in 2022, the remote assistance tool is now widely used by WOLFF service technicians, and leasing and purchasing customers can also benefit from it.

"Of course, you can also quickly and easily solve some of these problems with a video call," says Achim Spillmann, Director of After-Sales Service at Wolffkran GmbH. "But WOLFF Assist is more than just a conventional communications tool with video calling. It is a smart service tool that has been specifically tailored for the demands of a construction site and crane."

The smart glasses make up the centerpiece of WOLFF Assist. Equipped with a camera, microphone, and monitor, these smart glasses are worn on the head or attached to the helmet, allowing the person on the crane to have their hands free at all times, which is a major benefit in terms of safety and flexibility. The glasses transmit the field of vision of the technician on the construction site to WOLFF service experts in real time. In other words, it shows exactly what the technician on the crane is seeing and can specifically assist them with troubleshooting – either verbally, via chat, or even via screen sharing with a highlighting function.

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### **SPRING UPDATE**

Looking back on 2023, it was a very challenging year for many businesses working Construction

That said, at WOLFFKRAN, we made some very positive steps forward. Adding new Tower Cranes to our fleet with more to come in 2024, introducing new innovative power options and lifting accessories through WOLFF Onsite, and reaching more than 700,000 hours without a recordable incident are some of my personal highlights.

As we get stuck into 2024, we are confident we have the best products, the safest lifting operations in the industry, excellent and availability from our global rental fleet. We look forward to a successful year with our customers.

Sales Director Adrian Hawkins



## **UK Plant Operator of the Year 2024**

WOLFFKRAN Ltd is delighted to announce its continued sponsorship of the UK Plant Operator of the Year competition in 2024, spotlighting the tower crane category. This prestigious event, on September 20th-21st, celebrates the exceptional talent and unwavering commitment of professionals across the construction sector, from tower crane operators to a broad spectrum of plant machinery experts.

Adrian Hawkins, WOLFFKRAN's Ltd Sales Director, expressed his enthusiasm for the continued partnership: "Recognising the critical expertise and dedication of plant operators is fundamental. Their efforts are essential to the success of construction projects nationwide. We're eager to support and honour their hard work again at this year's event."

This year's competition is set to:

Showcase the exceptional skills of UK plant operators.

- Draw new talent into the industry, helping close the skills gap.
- Advocate for safer, smarter, and more sustainable construction
- methods.

Turn the event into a two-day festival of construction, highlighting

industry innovations.

Day one brings together OEMs & Distributors for talks and challenges, ending with a celebration of the industry's work. Day two steps up with the final contests, trade shows, demos, and a job fair, showcasing the best of construction.

"The expansion to include a dedicated Tech & Future stage enriches the event, making it a true celebration of construction," Adrian continued.

The UK Plant Operator of the Year 2024 isn't just a contest; it's a chance to highlight the important work of plant operators, spark innovation, and support a skilled, lasting workforce in construction.











Standing tall over the West London skyline, five Wolff tower cranes are helping to ensure the data requirements of our future are met. The hyper-scale Powergate Data Centre in West London is not merely a building, but the bringing together of technology, construction excellence, and engineering know how.

Data centres are playing an increasingly crucial role in supporting our digital requirements. Every time we use an App on our phone, join a video meeting, backup our computer or take on the world from our gaming console, the data centre is the unsung hero that enables it. Every digital interaction we have is handled by a data centre – indeed, they are essential for delivering goods and services for businesses, government bodies, hospitals, and schools to name a few.

Andrew Wiggins, Operations Director (Construction) at Mace gave us an overview of the project, "We at Mace have been appointed to manage construction of this hyper-scale Data Centre set in West London. The sheer scale of this project reflects the demand for an enhanced digital infrastructure, and we are delighted to have tower crane experts Wolffkran working with us."

"Having successfully tendered for the project, the team at Wolffkran advised on the placement and specification of the cranes needed to meet the site requirements, including working around existing services whilst achieving the desired reach and lift capacity." Continued Andrew.

At the heart of this project are five WOLFF tower cranes. These are currently operational 10 hours per day, although the site is likely to go 24 hours per day in the future. Wolffkran is additionally contracted to supply the eight tower crane operators and two crane coordinators needed to oversee and carry out all lifting operations.

"Simply having the right cranes and operators in place is only half the challenge though" commented Andrew. "Mace have also been really impressed with the crane management app Wolffkran use – 1Guava. The app has really streamlined crane time allocation and simplified lift management on site. This is a big step forward and has been incredibly beneficial for site efficiency."

Thanks to their built-in digital lift technology and robust manufacture, these Wolff cranes are proving pivotal in overcoming the unique challenges posed by this ambitious project - and their skilled operators are the ones making it happen.

## **Overcoming Site Challenges Using WOLFF Cranes**

The Powergate Data Centre project posed various challenges which each required their own innovative solution. The vast site included an intricate and delicate network of data cables and other services which could not be disturbed during the project. Additionally, it was established that heavy lifts would be required right across the site. Wolffkran's planning team designed a sophisticated scheme of five cranes, each with lifting capabilities beyond the ordinary.

The scheme of five WOLFF tower cranes includes four cranes equipped with enormous 70m luffing jibs, whilst the fifth has a substantial 60m jib. Cruciform bases are used for four of the cranes, but with twice the usual ballast of between 140T and 195T. This is to ensure the maximum possible stability with such long luffing jibs, during the anticipated heavy lifting operations taking place across such a large site.

### **The Tower Crane Scheme**

The intricacies of the tower crane scheme are a testament to the engineering precision required for such a colossal project:

- TC1 WOLFF 630 B: 70m jib, 41.9m tower, max capacity 28t (4.5t at 70m). KR12-60/80 cruciform base supported at 7m x 7m centres at 36.700m, 190t ballast.
- TC2 WOLFF 700 B: 70m jib, 41.9m tower, max capacity 30t (4.5t at 70m). KR12-60/80 cruciform base supported at 8m x 8m centres at 36.700m, 140t ballast.
- TC3 WOLFF 630 B: 70m jib, 44.5m tower, max capacity 28t (4.5t at 70m). KR16-80 cruciform base supported at 7m x 7m centres at 36.700m, 195t ballast.
- TC4 WOLFF 630 B: 70m jib, 42.3m tower, max capacity 28t (4.5t at 70m). KR16-80 cruciform base supported asymmetrically at 8m x 8m x 7.5m x 7.5m centres at 36.700m, 190t ballast.
- TC5 WOLFF 500 B: 60m jib, 45m tower, max capacity 30t (6t at 60m) with foundation anchors.
- TC6 In late March 2024, TC5 will be dismantled down to the slew ring using a 500t mobile crane. It will then be moved from the TC5 tower straight onto a new tower erected the week before, to become TC6. The rest of the crane will then be assembled and the 500t mobile dismantled and all in just three days.

Wolffkran Crane Supervisor & Coordinator Irena Stec sums it up: "We are using five huge, heavy-lifting luffing cranes on the project, capable of lifting 30T on their tightest radius, reducing to 6T when fully extended. Coordinating those cranes to work in harmony on a site of this scale, while minimising downtime and staying within their lifting capacities makes it a real challenge."

Additionally, there are a lot of complex lifts to be completed. These often require lifting accessories that have been specially made for this project, including lifting beams, cantilever beams and electronically operated beams.

"The other significant challenge we face is that it's a very exposed site, so poor weather conditions can really affect our ability to work safely, and we find we can be frequently winded-off." Irena told us.

## **Ensuring Safety and Efficiency**

At the heart of this operation are the WOLFFKRAN Crane Coordination Team, tasked with overseeing the seamless execution of the lifting plans. Their responsibilities include ensuring that site conditions align with the lifting plan, monitoring weather conditions, overseeing equipment maintenance, reviewing, and approving subcontractors, and taking charge of the day to day lifting operation so it all goes smoothly. Effective communication within the crane team is paramount, and any issues encountered during the lifting operation are promptly reported to the Crane Coordination Team.



# **WOLFF High-speed positioning assistance**

system available for order now

Just a year ago, Wolffkran was the first manufacturer in the crane industry to introduce the electronic assistance system: High-Speed-Positioning-System (HiSPS) at the bauma trade fair. It enables loads on the crane hook to be moved virtually sway-free and positioned with millimeter precision. Now the patent-pending technology is available for order together with Wolffkran's latest addition, WOLFF6523 Clear. At the beginning of 2024, additional newly manufactured WOLFF models will be equipped with the option of activating the HiSPS and existing WOLFF cranes can also be retrofitted.

The connectible HiSPS assistance system operates using two battery-powered sensors on the trolley and hook block of the crane hook. Connected to a control unit in the switch cabinet, it detects the rope's movements and automatically adjusts the motion and speed of the slewing gear and trolley to it. "Ultimately, the crane operator controls more than the crane – they control the load with assistance from the system," explains Viktor Mosolf, Head of the Digitalization Department at Wolffkran.

## **Greater safety at all levels**

By activating the HiSPS, the load that was already swinging as a result of the crane movement is stopped within seconds. This can also be used to eliminate heavy wind effects. Since the trolley always assumes its position automatically via the hook block when HiSPS is activated, it prevents the load from being pulled diagonally. The trolley automatically moves as well or is always positioned precisely over the load when the hook is manually pulled or when the load is manually pushed by hand on the ground. "HiSPS significantly reduces the risk of accidents and damage due to swinging loads or hooks," summarizes Viktor Mosolf. "Furthermore, the anticollision system is optimized since not only the crane but also the load in the working range limitation is automatically stopped."





WOLFF Onsite introduces the WOLFF Hybrid Power Unit, an eco-friendly and cost-effective solution suitable for on-site power demands. This innovative energy management system slashes fuel consumption up to 90%, marking a significant stride in sustainable construction practices.

### How does it work?

The WOLFF Hybrid Power Unit combines a battery pack with a stage V diesel generator, which can also be connected to the grid network or powered by solar panels. It has been strategically designed to optimise power delivery, with the battery taking on peak loads while the generator recharges it efficiently. With the benefits of a battery pack and the reliability of a conventional generator, the modular mobile unit is designed to adapt to weak grid connections and consume minimal energy, presenting substantial savings on running costs. Not only is this an economical solution, but the significant reduction in CO<sub>2</sub> meets the stage V emissions requirements, a vital objective for construction sites in the UK. This can be tricky, with other stage V generators breaking down on low load. The battery in the WOLFF Hybrid Power unit prevents this from happening, making it the ideal solution.



WOLFF Onsite with e-power sealing the deal for Sustainable Energy Solutions.

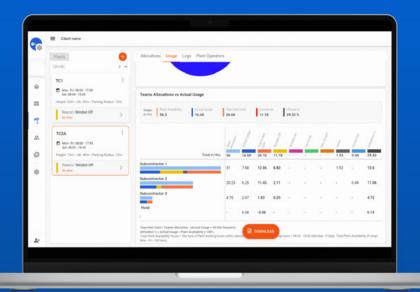
### **Committed to Sustainable Solutions**

"Expanding sustainable products in our portfolio is a pivotal goal for WOLFF Onsite. The WOLFF Hybrid Power Unit aligns perfectly with our customer's needs, especially for those aiming to meet stringent carbon reduction targets," states Tom McDaid, Sales Director of WOLFF Onsite. This product, available exclusively through WOLFF Onsite, is a testament to the collaboration with e-power® International, showcasing a commitment to sustainable innovation.

### **Launch and Availability**

The initial rollout of the WOLFF Hybrid Power Unit is set for March 2024, with subsequent deliveries planned in the months to follow. This collaboration is a landmark in the concerted efforts of both companies to foster eco-friendly advancements in the construction sector.

All WOLFF Onsite accessories and equipment are available to hire or purchase. Please feel free to reach out if we can assist with any of your upcoming project requirements. Please email: <a href="mailto:onsite@wolffkran.com">onsite@wolffkran.com</a> or contact Michelle Myers, Product Manager for WOLFF Onsite directly at <a href="mailto:m.m.myers@wolffkran.com">m.m.myers@wolffkran.com</a>.







# Projects perform better with Plant Utilisation Software

In the dynamic world of construction, efficiency and data-driven decision-making are crucial to success. At WOLFFKRAN, we encourage our clients to use the innovative 1Guava app, which is designed to elevate their construction project management.

## **Hook Time Analysis for Transparent Operations**

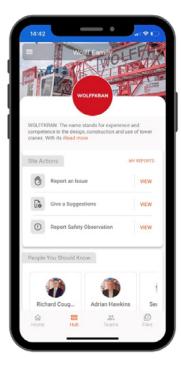
1Guava's Hook Time Analysis is a game-changer. It meticulously records the time a plant operator spends with different subcontractors, allowing for a transparent and equitable division of crane (or other machinery) time. This feature not only enhances operational efficiency but also provides clear insights into crane usage patterns, including downtime periods, thus reducing subcontractor disputes.

## **Paperless Solutions for the Modern Construction Site**

Understanding the challenges of on-site management, 1Guava's paperless solutions are here to help. The app facilitates the easy transfer of daily briefings, lifting plans, and other essential documents for signatures between employees, streamlining processes and eliminating the need for paper trails. Share photos and reports or create PDF documents – all within the app. This functionality drastically reduces time spent on administrative tasks and helps keep all essential documents organised and accessible.

## **Diagnostic Data Analysis at Your Fingertips**

Traditionally, understanding your machinery's usage has been a challenge. 1Guava offers sophisticated diagnostic data analysis tools, providing a clear and transparent view of your machine's performance and utilisation. This insight is invaluable for proactive maintenance and optimising operations.





To improve efficiency and reduce additional costs on your project, <u>book</u> a free demonstration today.

# **WOLFFKRAN's Year of Social Engagement**

# and Impact: A Look Back at 2023

As we move into 2024, WOLFFKRAN takes a moment to reflect on a year marked by robust community engagement, meaningful environmental contributions, and collective efforts toward fostering a sustainable and inclusive future. Here's a glimpse into a few of our activities that resonated with social value and engagement in 2023:

### **Sparking Interest in Engineering**

Sparking Interest in Engineering In Rotherham, WOLFFKRAN ignited the curiosity of future engineers at a local high school's Careers Fair. Our team engaged with students from Year 8 to Year 11, discussing career paths in engineering and construction and answering various insightful questions about crane operations. This initiative aimed to inform and inspire the next generation to explore the dynamic world of construction and engineering.

#### The **Yorkshire Three Peaks** Challenge

testament teamwork and perseverance, our participation in the Challenge Yorkshire Peaks Three represented our commitment to physical endurance and team spirit. It resonated with our dedication to charitable causes, significantly contributing to the Children's Heart Surgery Fund.



**Bridging Education and Industry** 

Our engagement with the Sheffield Work Experience program reflects our commitment to nurturing young talent. By providing practical, hands-on experience in areas like CAD, we are helping shape the future of aspiring professionals and reinforcing our position as a supportive pillar in the region's educational landscape.

### **Sheffield Children's Hospital Snowflake Appeal**

Our continuous support for the Snowflake Appeal, including a substantial donation in 2022, highlights our long-term commitment to the community's welfare, particularly in supporting the invaluable work of Sheffield Children's Hospital.



### **Preserving Natural Habitats**

commitment to environmental conservation took a practical turn with the Sheffield & Rotherham Wildlife Trust at Blacka Moor Nature Reserve. Eight dedicated team members devoted their day to bracken pulling, a vital activity to maintain biodiversity and protect native species. This physically demanding task underscored our commitment to ecological preservation and the broader social value it brings to local communities.



#### Racing for a Cause

A team of ten WOLFFKRAN employees participated in the challenging rewarding Race for Life. Not only did our team brave the heat to support Cancer Research, but their collective efforts, amplified by generous donations and a bake sale, underscored our commitment to community welfare and health initiatives.

### Driving Fairness, Inclusion, and Respect

WOLFFKRAN's participation in the SCSS event underscored our dedication to fostering a workplace culture rooted in fairness, inclusion, and respect (FIR). The insights gained from this event are being transformed into actionable initiatives to enhance our internal culture and positively influence our communities.world of construction and engineering.



# Thanks for reading! *⊞*⊠

