Putzmeister

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Putzmeister









Dear colleagues, partners and friends of Putzmeister,

The time has finally come: After three years and the Covid-related change in date, we will be at bauma 2022 — the world's leading trade fair for construction machinery — in Munich from 24th to 30th October. Our motto: "Follow the way of Putzmeister — Today, tomorrow, into the future".

It is our aim to convince visitors to the trade fair, and therefore all customers, partners and interested parties, with our stand and appearance that the Putzmeister Group is the best partner for them — for today, for tomorrow and into the future!

Always the best solution: Follow the way of Putzmeister

Our trade fair team will guide visitors through our highlights at an impressive stand spanning 2700 m² in hall B6, aided by a colour-coding system: Today (Putzmeister yellow); Tomorrow (iONTRON blue); Future (magenta/purple). The presentation of our many new products and even our digital solutions are also colour-coded, making it easy for visitors to orient themselves:

Today represents our latest innovations, from the new Ergonic® 3 control system and other solutions for the concrete sector through to digital solutions under our "360° Customer Experience".

Tomorrow gives insights into the growth of the iONTRON family, from the first electric mixer to the EstrichBoy. Sustainability is another topic covered here.

Future shows our visitors which innovations we are preparing for the future of the sector, including Precast 4.0 automation, a fully automated precast plant, and Karlos, the first mobile 3D printer for concrete.

Our parent company SANY will present two new concrete pumps to expand our range at another stand in the external area with a total area of 500 m², located within walking distance of hall B6.



We wish our trade fair team all the best and every success!

We are also sending a strong signal in favour of sustainability at bauma 2022 by largely foregoing paper. Instead of the traditional printed information, we will have QR codes leading to the new landing page **https://bauma.putzmeister.com** to provide our visitors with information about all important details. We will also record orders digitally, enabling precise processing after the bauma trade fair.

Our Putzmeister restaurant and the popular Elephant Bar will once again cater to the culinary needs of our trade fair visitors.

I would like to thank all those involved for the excellent preparation for bauma 2022 and I would like to wish our trade fair team a successful time in Munich with many worthwhile encounters!

Kind regards.

Christoph Kaml Chief Executive Officer (CEO) – PMH

| B5 HOME | BOUMO NEWS

INNOVATIONS AROUND THE CONSTRUCTION SITE OF TODAY. TOMORROW AND THE FUTURE



FOR HIGHER PRODUCTIVITY AND AGAINST THE SHORTAGE OF SKILLED WORKERS IN CONSTRUCTION: THE MOBILE AND HIGHLY AUTOMATED 3D PRINTER KARLOS

A solid wall straight from the 3D printer: With KARLOS, concrete walls can be built in a short time — without any conventional formwork and with classic standard concrete!

As a highly innovative combination of a mobile concrete pump and precise robot technology, KARLOS allows for a quick set-up on the construction site and a highly automated creation of walls.

This not only reduces manual labor and safety risks on the construction site, but also enables more efficient and time-saving construction compared to conventional construction methods. Sustainability is not neglected either: KARLOS operates fully electrically and with low emissions on the construction site and creates the possibility to use CO₂-reduced concrete formulations.



THE NEW FULLY ELECTRIC IONTRON TRUCK MIXER

With its 8x4 axles and the proven Putzmeister design, it looks like a normal truck mixer at first glance. Even the drum size of 9 m², the total weight of 32 t or the payload do not differ from a conventional truck mixer. The special feature lies in the drive: the new iONTRON truck mixer is based on a SANY electric chassis and is powered 100 % electrically.

This means that no CO_2 emissions are produced during operation, neither during the journey nor when working on the construction site. The noise level is also significantly lower due to the electric drive: ideal wherever strict noise protection regulations apply.





iONTRON FAMILY

With the successfully launched iONTRON hybrid truck-mounted concrete pump, Putzmeister once again pioneered e-mobility in construction. Now it's time to take the next step. With the iONTRON product family from Putzmeister, we are guiding you into a sustainable and environmentally friendly future.

The iONTRON family is complemented by the BSA stationary concrete pump with electric drive and the new electric EstrichBoy EC 450.





ON YOUTUBE

INTELLIGENT SETUP CONTROL AND FULL FLEX SUBSTRUCTURES

At bauma 2022, we are exhibiting machines with the new iSC support software and the new Full Flex substructures for the first time.

The BSF of the 20 m class, BSF 47 and BSF 56 can be used with maximum variability on any construction site.



The new iSC software calculates the working areas according to the selected support live on the machine and even takes into account the individual equipment and thus also the individual weight of the machines.

The new Full Flex substructures make it possible to support in every conceivable position with the front telescopic legs and rear swivel legs. Just as the construction site requires. In addition, 0-support is now possible, in which all support legs remain completely retracted.

A reach forecast for the dispatchers will be available online and for the machine operators on site at the machine.

With the safety system, Putzmeister guarantees that work can be carried out with 100 percent stability when the machine is used as intended.

The drop warning informs the machine operator of changes in the machine's inclination directly on the radio remote control.

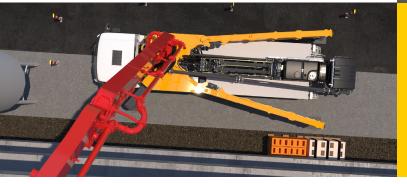
All safety-relevant factors are already taken into account when specifying the working range. The working ranges shown can be reached even in the most difficult weather and with concrete in the delivery line.

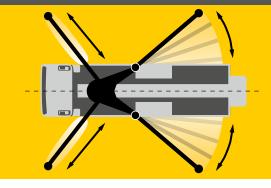
Each boom segment is equipped with position sensors so that the flexibility can be utilised to the maximum. Without the sensors, the worst case (horizontally stretched arm) would always have to be assumed.

Site tests have repeatedly surprised experienced concrete pump operators and shown that more is possible than most would give the machines credit for.

With iSC, larger machines (e.g. BSF 47) can now cope with construction sites where previously only the setup of a BSF 24 was possible.







360° DIGITAL SOLUTIONS

Exactly two years ago, Putzmeister expanded its portfolio with the MyPutzmeister portal, a modern platform for Putzmeister customers and dealers. All relevant information can be accessed in bundled form at MyPutzmeister, in order to be able to manage machine data and documents for a specific machine, among other things, and retrieve them as needed.

One application integrated on the platform is particularly interesting for dispatchers: the Machine Cockpit. With the help of this tool, they are able to access machine data in real time and view the current status of their concrete pumps and truck mixers.

In addition to a clear identification of critical machine faults, particularly detailed information on the cause of the fault as well as recommendations for action to solve the problem should significantly reduce downtimes.

With the MyFleet function, Putzmeister supports the dealers — and thus also the end customers. MyFleet provides a complete overview of the machines available in the sales area. In this way, Putzmeister dealers are able to serve customers even better by being able to call up targeted and quick information such as service documents or even special promotions from Putzmeister.

Not only the machine cockpit and MyFleet are merging more and more into a digital 360° view of the machine. In the Preventive Service List function, Putzmeister dealers are now automatically informed about upcoming maintenance and safety checks based on real-time machine data. This enables dealers to automatically inform or remind customers about upcoming inspections and tests — for better planning and to reduce unplanned repairs to the machines. In the event of a warranty claim, the applications are now also processed completely digitally in order to be able to provide feedback to customers much faster than before.



PRECAST AUTOMATION 4.0



In recent years, Putzmeister has focused, among other things, on developing future-oriented, i.e. resource-optimised, modular and efficient system concepts for the precast industry.

Whether for tunnel or industrial construction, for wind power, house or bridge construction — under the umbrella term Precast Automation 4.0, the company is now presenting solutions that can be tailored exactly to the needs of the customers.

A wide variety of pumpable concretes can be processed into prefabricated elements with a consistently high concrete quality — and this can even be automated to the greatest possible extent.

The Putzmeister offer could be interesting for many customers, also and especially under the aspect of the impending shortage of skilled workers. Because the most modern plants require very little personnel. Nevertheless, they promise a lot of output in much less time.







MORE INFORMATION



ON YOUTUBE

Putzmeister





DIGITALISATION MEETS INNOVATION

Leading change in the construction industry with pioneering innovations: This is a vision that Putzmeister embodies with its Innovation Factory, founded in 2017, in order to strengthen its position as the global market leader. The aim of developing innovations with a real added benefit for customers is at the centre of it all.

PUTZMEISTER "INNOVATION FACTORY" DEVELOPS PRODUCT INNOVATIONS WITH ADDED VALUE

While the focus at the time of its foundation lay solely on digitalisation, the Innovation Factory is now also responsible for developing new products outside of the current machine portfolio, much like a traditional innovation department. In doing so, the Putzmeister team is working at the forefront of progress and involves customers in the process, in order to integrate and understand their essential requirements and later implement them in their innovations in close cooperation with the Putzmeister Development and IT departments. Customers then review these innovations in the form of prototypes as early as possible in order to ensure maximum added value.

The Innovation Factory mainly focuses on two areas: Increasing productivity and promoting sustainability in the concrete construction sector. It examines both fields with questions like these: How can we minimise machine failures while in use? How can we reduce manual labour for concreting on construction sites? How can we reduce carbon emissions to a bare minimum in the concrete construction industry? These questions provide the guidelines for identifying and developing product innovations.

The machine cockpit provides the foundation for innovations in the field of productivity. It was the first innovation to come out of the Innovation Factory. Since its introduction at bauma 2019, the machine cockpit has been employed by many customers around the globe to improve the productivity of their machines in daily use. Machine data has now been increasingly integrated into service processes in order to reduce machine failures and further increase productivity. This enables proactive maintenance planning, for example. In a next step, the team is already working on a continuous machine state analysis in order to detect looming failures early on.

In addition, Putzmeister is also engaged in new technologies such as 3D concrete printing. Here too, the Innovation Factory is looking to ensure that this new technology is developed into a true innovation with added value for customers that sustainably improves work on construction sites.



An excellent example of innovation in the area of sustainability is the new, fully electric iONTRON truck mixer. It celebrates its global début at bauma 2022.



SUPPORT FOR SCHOOL CHILDREN AND COMMUNITIES IN INDIA

Since 2014, Putzmeister India has been supporting the Bethesda Life Center (BLC) under its CSR programme by providing monthly rations, bunk beds, mattresses, clothing, and celebrating birthdays and Christmas. In 2018, an extension to the home was built. Putzmeister distributed books and school supplies, built school desks, toilets and a library, equipped a music room and provided a bus for disabled children in local schools who requested assistance.

When the second wave of Covid hit local communities hard and streched the healthcare infrastructure. Putzmeister donated ventilators to local health authorities.



昌5) HOME

FIRST BSA 1005 D5 ON MALLORCA

The Putzmeister stationary concrete pump BSA 1005 D5 was launched last year with all its improved features, very simple and intuitive use, and a totally innovative, compact and robust design.

Bombstatic, a company dedicated to concrete pumping in the Balearic Islands, Spain, has acquired the new Putzmeister concrete pump, the first sold in Spain, which allows a multitude of applications, some of which are already being put into practice: from wet concrete spraying, to flexible use in urban centers and in tunnel construction, but also allowing quick and flexible use on small construction sites.

Bombstatic has a large fleet of Putzmeister equipment, from truck mounted concrete pumps to smaller equipment, and once again trusts Putzmeister through its official distributor in the Islands, ITT CM93. In addition, with the acquisition of the BSA 1005 D5, Bombstatic reinforces its environmental commitment

The new machine is respectful with the environment thanks to the regeneration diesel engine in operation with compliance with EU-StageV regulations and the easy-to-use intelligent control that automatically reduces the engine revolutions with idle speed, thus saving gasoline and reducing noise.





PUTZMEISTER MACHINES IN MAJOR PROJECT STORSTRØM BRIDGE, DENMARK

THE NEW STORSTRØM BRIDGE IN DENMARK MADE OF PRECAST CONCRETE ELEMENTS – QUALITY, COSTS AND CONSTRUCTION TIME SPEAK FOR THEMSELVES!

With a total length of almost 4 km, this bridge will be the third longest in Denmark and will bring Germany and Denmark a good deal closer.



Key project data

Bridge length 3,832 m
Ship passage height 26 m
Construction costs 560 million euros
Use Two railway and vehicle lanes each,

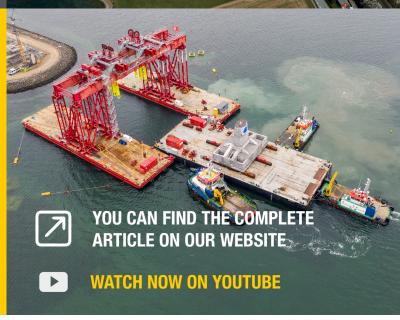
Iwo railway and vehicle lanes each, one combined cycle/pedestrian path

Connects the islands
Construction of precast plant
Construction of of precast plant
Construction of precast plant
Construction

concrete pumping system 09/2019 – 02/2020 First concrete pumping 10/2019

(Floors of production hallsn) Start of precast production

06/2020





ECO-FRIENDLY ELECTRICAL ENERGY FROM INDUSTRIAL WASTE SLUDGE

In 2021, SCG Cement Co. Ltd has chosen a Putzmeister Industrial Pump system to inject industrial waste sludge into a gasifier furnace to generate eco-friendly electrical energy. This installation is located within the Maptaphut Eco-Energy Plant (Rayong, Thailand).

Putzmeister has built creditability with another Industrial Pump supplied to Keang Khoi in 2008. The pump has been operating reliably for over 10 years and counting. The machine quality, coupled with outstanding aftermarket support from the local Thai dealer SM Corporation Co., convinced SCG that Putzmeister is the best choice for this project.

The Putzmeister solution is a closed system which ensures no contamination to the surrounding environment. The system is also designed to be ATEX compliant as it is operating in a hazardous area.

The positive displacement piston pump provides a precise output of sludge into the kiln, achieving an efficient combustion cycle for the plant.

SCOPE OF SUPPLY FROM PUTZMEISTER

- Engineering for a receiving silo with a volume of 60 m³
- Twin shaft auger feeder THS 332 HCB
- High density piston pump KOS 1040 HP + HMC-S 180
- Hydraulic power pack HA M 55
- Switch- and control cabinet SEP 55
- Diversion valve SDVH 3/2

OPERATING PARAMETERS

- 24/7 operation
- $0.3 1.0 \text{ m}^3/\text{h}$
- 150 m ZX delivery pipeline Ø 200 mm

PUMPING MATERIAL

- Industrial waste sludge
- Oil sludge

PROJECT HIGHLIGHT

The project was awarded in 2019. When the equipment was due for delivery, the world was facing a peak of the Covid-19 pandemic. Travel restrictions made it impossible for German experts to fly in for the commissioning. Not to be deterred, Putzmeister, SCG and SMCORP persevered on with online meetings, and even devised a "Online Commissioning" plan, using technology and video conferencing to allow the experts see and hear what is happening on site, thousands of miles away.

Finally, the system was successfully commissioned. The plant can now accept sludge and generate income from Green electricity.





INTRODUCING PUTZMEISTER OCEANIA



We are pleased to announce that Putzmeister has acquired CPE Machinery Pty Ltd. in Australia. Since May 2022, CPE Machinery is the youngest Putzmeister subsidiary Oceania.

CPE Machinery was built with passion and a zest for knowledge of all things about concrete pumping. Its mission has always been to become the best company in this field within Australia and beyond. Founder and former Managing Director, David Bond believes that this acquisition can take the company to greater heights; merging the global expertise of the Putzmeister brand and the local know-how of CPE's talents into a stronger company that can serve the market better.

From the perspective of Putzmeister, Head of Asia Pacific, Michael Schmid-Lindenmayer explains "CPE Machinery has for a long time been one of our flagship dealers. For us, seeing the growth of CPE Machinery over the last few years, and the strength of the Australian market, it is a very natural progression to make this acquisition. It presents an opportunity for us to inject further investments into the future of concrete placing in Australia and surrounding countries. We will continue to strengthen the offering, grow the business and ultimately provide the best support possible to the Oceania region".

What does this mean for our customers? You will now be dealing directly with Putzmeister. Putzmeister just got closer to your business. David will continue to be involved in an advisory role for some years. Over the next few months, you'll see some new reinforcements added to the team too. Mostly, it will be the same people, same products and brands¹. Business as usual!

There will be some changes to the way we look as we transition from CPE Machinery to Putzmeister Oceania, mostly just to reflect the change in the legal entity.

Off the blocks, we are going to offer a new line of concrete pumps! Putzmeister Oceania is now responsible for the distribution and support of SANY Concrete Machinery in Australia. SANY Concrete Machinery complements our existing portfolio by offering a quality alternative at a cost-effective price point, supported by the technology and experience of Putzmeister. We also intend to expand our product offering to the mining industry.

We're proud of what we have achieved thus far and thrilled about the opportunities that lies ahead to serve you better as Putzmeister Oceania.

¹ including Trelleborg, Esser, ConForms, Boom Makina and Maxon



A full range of Putzmeister equipment, from stationary pumps to shotcrete robots, will be aiding in the expansion and modernisation work for the Lisbon Metro, the largest underground construction project in Portugal for decades.

Maquinter and ZAGOPE are spearheading the first works with Putzmeister equipment

The first part of the contract, valued at € 48.6 million, was awarded to ZAGOPE, the leading construction company in Portugal.

The first shotcreting works began last May. >>

PUTZMEISTER MACHINES IN THE CONSTRUCTION OF THE LISBON METRO





ZAGOPE relied on Putzmeister equipment rented from Maquinter, the official Putzmeister dealer in Portugal.

"ZAGOPE and Maquinter have a business relationship spanning over 20 years — it is an honour to be working together on this largescale project that will improve the daily life in our city," commented João Gouveia, Managing Director of Maquinter.

Two Putzmeister PM500PC shotcrete robots are already engaged in preparing the tunnels between Rato and Estrela. Between Estrela and Santos, and at Estrela station itself, they will be joined by a PM 407 at a later stage in the project.

Lowering the equipment down to the tunnels in the narrow, cobbled Lisbon streets is a challenge. To overcome it, ZAGOPE has begun by constructing access shafts that are reinforced with shotcrete using Putzmeister equipment, specifically two PM 702E and the two robotic PM 500PC.

In addition to the mentioned equipment for spraying concrete, the project is also making use of four trailer concrete pumps from the Putzmeister BSA 1400 series.

"We are not only offering the best shotcrete equipment in Portugal, but also providing technical advice for ZAGOPE with regard to concrete engineering, supporting the necessary maintenance so that the machinery is always working at 100 % and delivering instruction sessions for machine operators during the construction phase," added Mr Gouveia, who is a trained engineer and has analysed the project in great detail in order to provide a complete service and adapt to the necessary requirements.



THE PROJECT

The ambitious Metro expansion and modernisation project aims to improve urban mobility in Lisbon. Works began in the first half of 2021 with a public opening scheduled for 2024.

A sum of € 210.2 million has been invested in the project, which will be completed in two phases. During the first phase, which is currently under way, the Green line will be extended by 1900 m from Rato to Cais Sodré, including the construction of the two new stations Estrela and Santos, and thus be converted into a circular line. During the second phase, the Red line will be extended by 4 km with four new stations.





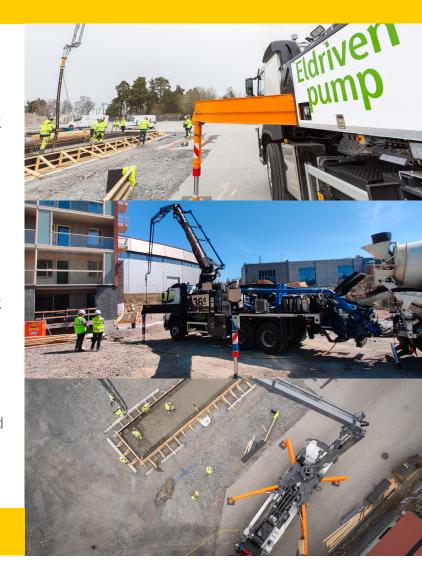
HYBRID TRUCK-MOUNTED CONCRETE PUMPS SUCCESSFULLY IN USE

For one year now, the iONTRON Hybrid truck-mounted concrete pumps have been launched very successfully. The high demand shows us that we are on the right track to lead the market towards sustainable solutions. Sustainability is at the heart of our innovation strategy, and we accompany you into an environmentally friendly future.

There is also good news for all construction sites. Thanks to valuable customer feedback in our first pilot markets, we have solved the problem of available construction site power: from now on it is possible to to work with 63 A!

This means that an iONTRON Hybrid BSF offers the full range of operating modes: 63 A, 125 A or diesel.

Our Finnish customers have already successfully used the 63 A on eight construction sites and are very satisfied with the performance of up to 50 m³/h or max. 50 bar.





ERGONIC® 3 EASE OF USE REDEFINED

- # **Continuous operating** concept for all Putzmeister products with the same functions and displays whether on the radio remote control or the Ergonic® Graphic Display (EGD).
- # Intuitive work and quick reactions thanks to a clear menu structure and intuitively arranged functions.
- # Full overview of machine status on the radio remote control and EGD (incl. valves, sensors, LEDs on fuses).
- # **Detailed fault management**: Faults are easy to detect and rectify even without a Putzmeister technician.
- # **Multi-level emergency operation** keeps the machine running even in the toughest conditions and in virtually every case.



Another convenient function for machine operators is the intelligent Boom Control (iBC). This feature makes it even easier to control the arm assembly. All arm movements can be controlled easily and precisely via the joystick using just one hand. The response characteristics have been improved by another 80 % compared to the Ergonic® 2.



Simulation

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Putzmeister has completely revised the intelligent Setup Control (iSC) safety system. It enables the machine to be set up in a fully flexible manner to suit the relevant conditions on the construction site. All without having to specify a support configuration first, but with a guarantee that the machine can be operated absolutely securely.



iSC AND FULL FLEX



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