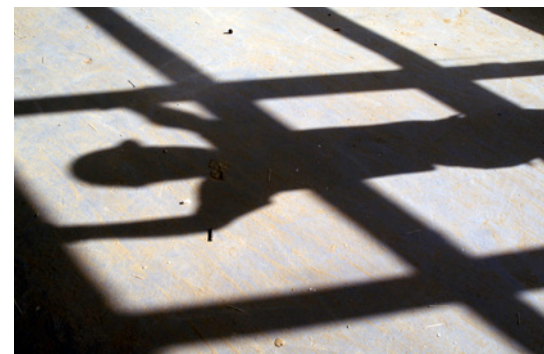




Putzmeister



Truck-mounted concrete pump 31-5

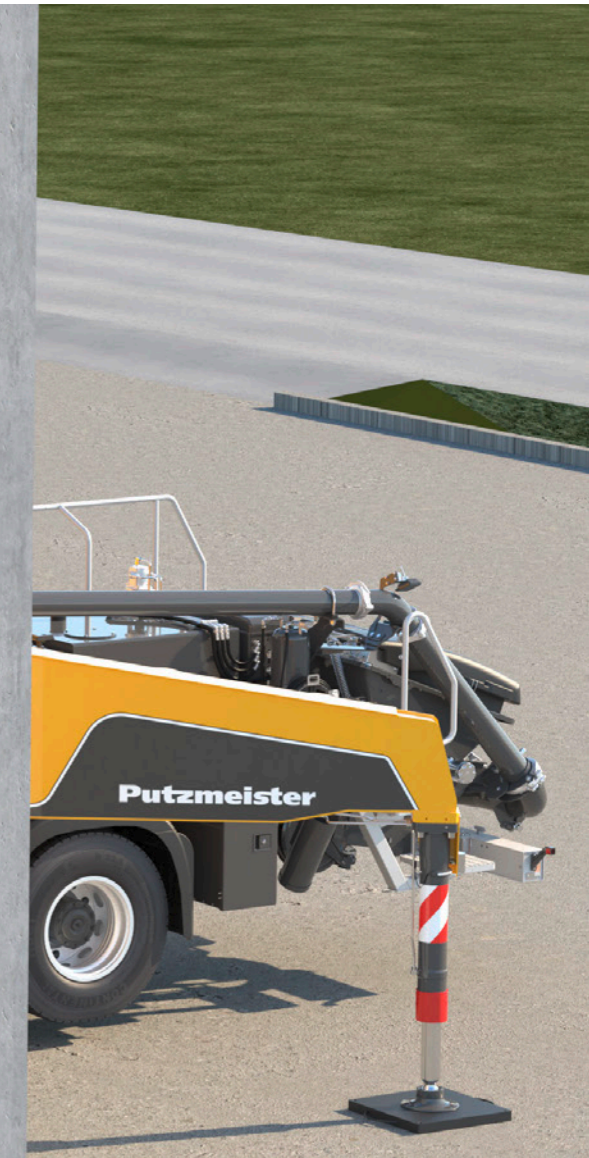
Manoeuvrability in every dimension

Solid quality with excellent slip characteristics



Flexible right down to the ground – the new 31-5

Its flexible 5-arm boom ensures maximum manoeuvrability in all directions, making the 31-5 the perfect machine for restoration and smaller job sites. Additionally, it has a particularly robust design and comprehensive standard equipment, including Ergonic® 2.0 and extended support options, among other things. This means that our smaller truck-mounted concrete pumps are now capable of completing tasks that were previously only possible using larger machines. This comes with its own advantages: More convenient operation, increased cost-effectiveness and efficiency in day-to-day use and flexibility when working with the machine.



The Putzmeister promise

The name Putzmeister stands for machines that enable you to work with extreme productivity and go beyond purely being competitive. To this end, we provide extraordinarily innovative technologies alongside top quality and excellent service. We are fully dedicated to supporting you both around the world and around the clock. And this is because every Putzmeister employee recognises that your machine has important jobs to do.

Your Putzmeister Team

The placing boom – extremely flexible for use indoors

Approx. 31 m vertical reach using 5 arms optimally

The boom of the 31-5 is incredibly agile. This benefit comes in particularly handy when working in low buildings and under bridges. Optimum slip characteristics, swinging with a folded arm assembly and its low unfolding height make working inside buildings no problem at all. The optimised kinematics ensure that the working area is maximised and there is no “dead space”. This makes the 31-5 unbeatable for many jobs, particularly for renovation work.



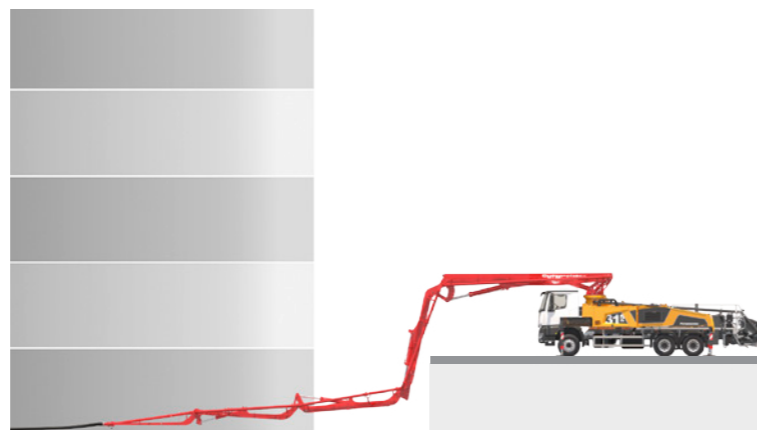
Work precisely and conveniently, right down to the last detail

The boom control's fast response characteristics, the sophisticated routing of the delivery lines and the robust steel structure ensure precise work. The boom only swings minimally, even at high outputs.



Even more comfort with EBC (Ergonic® Boom Control)

The fully electronic control system with integrated vibration damping enables the end hose to be guided continuously. The boom can be moved even more smoothly using the joystick in one-handed operation. Limiting the working area or locking arm positions increases occupational safety.



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inside

The boom at a glance

- Optimum slip characteristics
- Approx. 31 m vertical reach with 5 arms in roll-Z fold system
- No dead space, more flexibility
- Lower unfolding height
- Fast response characteristics of boom control
- Safety thanks to reduced boom vibration
- EBC for vibration damping, one-handed control and limitation of workspace (optional)
- Slewable with folded arm assembly
- Standard 90° and 45° elbows, with lengthened collars for a longer service life
- Electrical centralised lubrication system for hopper, A hinge and four-point bearing



Optimum capacity utilisation thanks to maximum availability

Robust components with high wear resistance, many maintenance-free and standard components, simple and quick access, as well as screwed-on parts such as the pipe bracket help you to save considerable amounts of both time and money. The electrical centralised lubrication system for the hopper, A hinge and four-point bearing additionally ensures that the service life of components that are subject to high stress is maximised without any additional work or expense.

Robust components

- + Maintenance-free components
- + Centralised lubrication system
- + High wear resistance

= Maximum service life

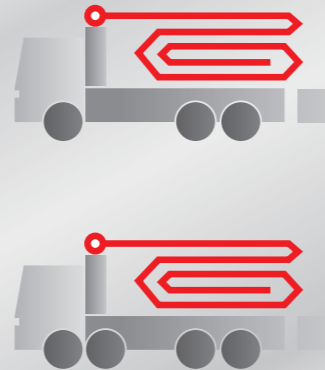
The pedestal – built on intelligent solutions

Spoilt for choice

The 31-5 is available as a version with three or four axles.

On small job sites or in the city – that is to say, in locations with only a small working area – choosing the compact, manoeuvrable 31-5 with three axles is the right decision.

In comparison, the 31-5 with four axles is suitable for a significantly increased total load and is ideal for working on job sites which require more accessories.



The new pedestal at a glance

- Plenty of storage space thanks to long swinging support legs
- Flexible, space-saving TRDI support system
- Significantly reduced support widths with use of OSS* and ESC*
- Fewer obstacles in the surrounding area such as traffic
- Saves money thanks to maintenance-free components, comprehensive screw concept, standard components and I-frame concept for improved distortion characteristics

Space-saving and quick to set up and take down

With TRDI support, developed by Putzmeister, you can save time and space without compromising on safety. Telescoping support legs can be placed between obstacles in the smallest of spaces. A huge advantage when working under restrictive setup conditions, such as in cities or low buildings.

Narrower support with OSS and ESC

With OSS* (One-Side-Support) narrow support and ESC (Ergonic® Setup Control)**, the small support width is reduced even further. An advantageous side effect: Full use is made of the net reach for the fully supported side.

* OSS – Assistance device for One-Side-Support, optional.

** ESC – Safety system for One-Side-Support (as per EN 12001:2012).



Economy with a long expected service life

TRDI is particularly impressive when it comes to force distribution. If the machine is correctly supported on its legs, the forces acting on it are completely distributed over the support legs, protecting the vehicle. The I-frame and connection concept also ensures a longer service life than that of rigid frames. Maintenance-free components, a comprehensive screw concept as well as a wide range of standard components additionally help to keep operating and maintenance costs low and easy to calculate.

The concrete pump – power and durability, perfectly combined



Increased power, smoothness and efficiency

Thanks to EPS (Ergonic® Pump System) – the computer-aided control system – the pumping process is smoother and more efficient overall and the boom vibrates less. The EOC (Ergonic® Output Control) module controls the engine speed, thereby preventing it from entering unfavourable speed ranges. This reduces fuel consumption, wear and noise. The same applies to the SN control system and Push Over, which ensure that the concrete column is pushed very gently.

For any requirement – the choice is yours

Like all Putzmeister truck-mounted concrete pumps, different pumps with a delivery pressure of 85 bar are available: The 16 H with two chromium-plated delivery cylinders (dia. 230 mm), which is cheaper in comparison, and the smooth 16 H LS (dia. 250 mm). They both offer a delivery rate of 160 m³/h, but the LS version has a lower number of strokes and is thus subjected to less wear.

Pumps – technical data

Model	Output m³/h	Pressure bar	Stroke mm	Cylinder Ø mm	Strokes/min
16 H	160*	85	2100	230	31
16 H LS	160*	85	2100	250	26

All data represent theoretical maximum values.

* Rod/piston side. Max. delivery rates and max. delivery pressures cannot be operated at the same time.

Strong unit for every type of concrete

Pumps from Putzmeister are designed for all common types of concrete with their coordinated geometry. The success factors: The closed free flow hydraulics which generate more power while consuming fewer resources because the oil reaches the cylinder with minimal losses. The S transfer tube point, reinforced through

build-up welding, which has a long service life even with wear-intensive materials. And lastly, Ergonic® 2.0 with the Putzmeister sustainability concept, which ensures efficient hydraulic fluid management and saves up to 50% more fluid. This allows environmentally friendly organic fluid to be used.



The pump at a glance

- **Pump geometry is optimally** coordinated to all common types of concrete
- **Service-friendly control system** with free flow hydraulics and thus consistently highoil quality
- **Particularly wear-resistant** design of S transfer tube switch, which guarantees long service life
- **Optimised hopper** (screwed-in grille, improved shape and optimised S transfer tube storage)
- **Agitator safety shutdown** via RFID (Radio Frequency Identification), a detection system using electromagnetic waves, including start-up protection
- **Smooth, optimised pumping** with EPS and EOC, protects the pump and the vehicle
- **Optimised switchover procedure** with SN control system and Push Over avoids wear-intensive pressure peaks
- **More convenient operation** with Ergonic® 2.0, the latest concept for control hardware and software from Putzmeister
- **Minimum operating costs** thanks to maintenance-free components, avoidance of special components and good accessibility
- **Easy replacement of components** due to screw concept, e.g. support cylinder
- **Automatic agitator** direction of rotation corresponds to pumping direction

85 bar
160 m³/h
230 mm Ø | 250 mm Ø
31 Strokes/min | 26 strokes/min
16 H | 16 HLS

Ergonic® 2.0 – designed by operators for operators



The benefits at a glance

- Light and ergonomic
- High-resolution display
- Economical Li-ion battery
- Plus cable operation
- Can be replaced using a chip (radiomatic® iLog)
- Robust electronics
- Backlit buttons
- All information available at machine operator's workplace
- Can be conveniently controlled using two joysticks, or just one with EBC
- Feedback system shows working areas, leg positions, machine tilt, etc. and makes it easier for stand-in workers to start working with the machine
- With a practical waist harness

The new radio remote control – work 2.0

The extremely robust radio remote control is considerably lighter in the hand, owing not only to its reduced weight, but also the well thought-out ergonomic design. All displays can be optimally read on the larger, high-resolution colour screen. A Li-ion battery with a longer life and minimal self-discharge supplies the remote control with energy for an entire working day. Alternatively the remote control can be operated using a cable and supplied with current. With Ergonic® 2.0, specific machine settings are transferred easily using a chip card. The machine operator has constant access to all the information about the machine at their workplace, shown on the colour display of the radio remote control.



Protection for the operator and the machine

Telescoping support legs that can be adjusted to any length prove their value, particularly where space is limited. ESC (Ergonic® Setup Control), the safety system from Putzmeister, ensures absolute control, enabling you to work flexibly in accordance with the EN 12001:2012* standard.

* EN 12001:2012: This standard specifies automatic checking of the interplay between the support system, boom movements and the pumping function.

Three defined support positions for the rear swinging support legs
Dimensions from the centre of the chassis: 1.70 m; 2.40 m; 3.30 m (fully flexible)

Four defined support positions for the front telescopic support legs
Dimensions from the centre of the chassis: 1.30 m; 1.70 m; 2.50 m; 2.90 m
(Numerous flexible support configurations are possible)

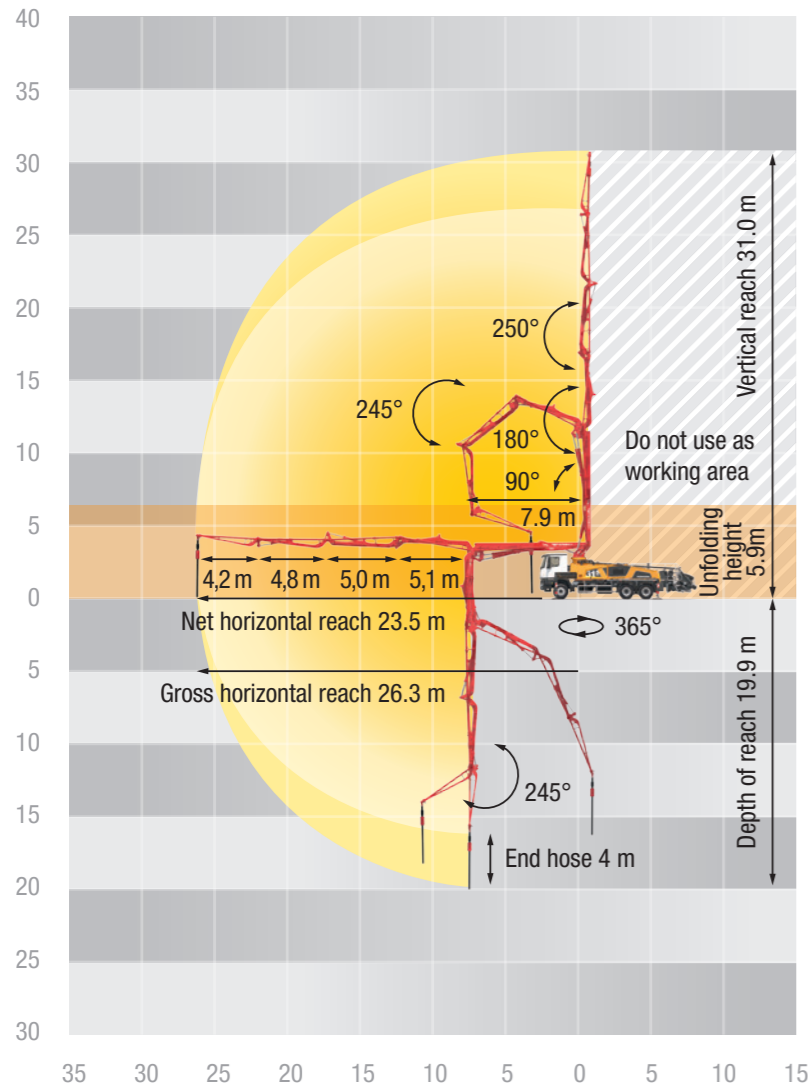
Switching centre for maximum efficiency

If our concrete pumps form the heart of our machines, then Ergonic® 2.0 system is the head. As a switching centre, the microprocessor-supported control systems regulate the functions of concrete pumps, truck mixers and PUMI®. Increased efficiency, reduced costs and greater flexibility – these are the results of Putzmeister machines with Ergonic® 2.0 overcoming the difficulties of day-to-day work on the job site.



ergonic®
inside

Technical data 31-5



Placing boom

Folding system	5-arm roll-Z fold system
Vertical reach	31.0 m
Horizontal reach	26.3 m gross
Depth of reach	19.9 m
Unfolding height	5.9 m
End hose length	4 m
Delivery lines	DN 125, max. 85 bar
Slewing circle	365°

General

Support width	front / rear
Standard	5.2 m / 7.0 m
ESC	3.85 m / 4.75 m
OSS	3.85 m / 6.3 m
Overall length	10.85 m
Height	3.9 m

Equipment lines

To make it easier to select from the numerous configuration options, three comprehensive equipment lines, as well as a few option packages, are available.

Standard line

This equipment includes components which Putzmeister considers to be an economic standard for working efficiently and safely. Combined with the "German/EU road use approval" option package, the machine is ready for use throughout Europe.

High line

The high line provides easier operation, reduced maintenance costs and increased lighting comfort.

Exclusive line

This line represents the highest equipment level offered by Putzmeister. It includes selected premium components.

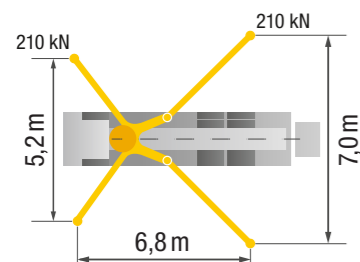


Added value for the same money

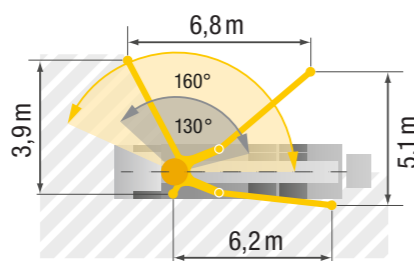
In addition to providing greater transparency and easier ordering, the option packages are cheaper than ordering individual options.

- **German/EU road use approval kit**
includes all the necessary equipment for approving the machine in the EU
- **Lighting kit**
also covers the lighting included in the scope of standard equipment
- **Operating kit 1 – EBC Basis**
reduces the vibrations for smoother boom movement
- **Operating kit 2 – EBC Plus**
offers a comfort function for boom control
- **Cleaning kit**
includes various components which make cleaning the machine easier
- **Camera kit 1 to 3**
includes various camera systems, from the reversing camera to the 360° camera
- **Driver kit 1**
includes options for increasing the horizontal reach
- **Further individual options**
are also available

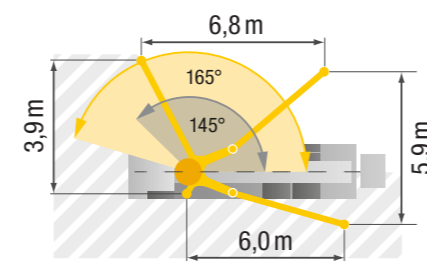
Standard



ESC



OSS



Vertical horizontal



Build on Putzmeister – in service, parts, training

Everything that sets service apart

Swift assistance, meaningful advice and a reliable supply of genuine Putzmeister accessories and parts - in over 120 countries worldwide. This is what we at Putzmeister understand as first-class service.

Ideally placed to support you

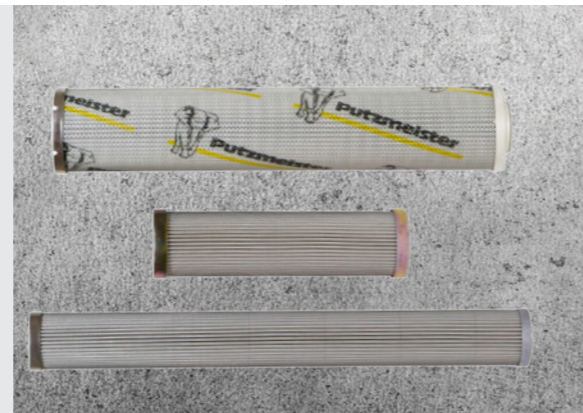
We train our service technicians continuously, provide a close-knit information network and the latest equipment and consistently strive to meet our customers' needs.

Thanks to state-of-the-art technology, our employees have all the relevant technical information about your machine at their fingertips, should the need arise. Allowing us to provide you with the best possible support for emergencies, repairs or preventive maintenance.



Genuine parts for maximum availability

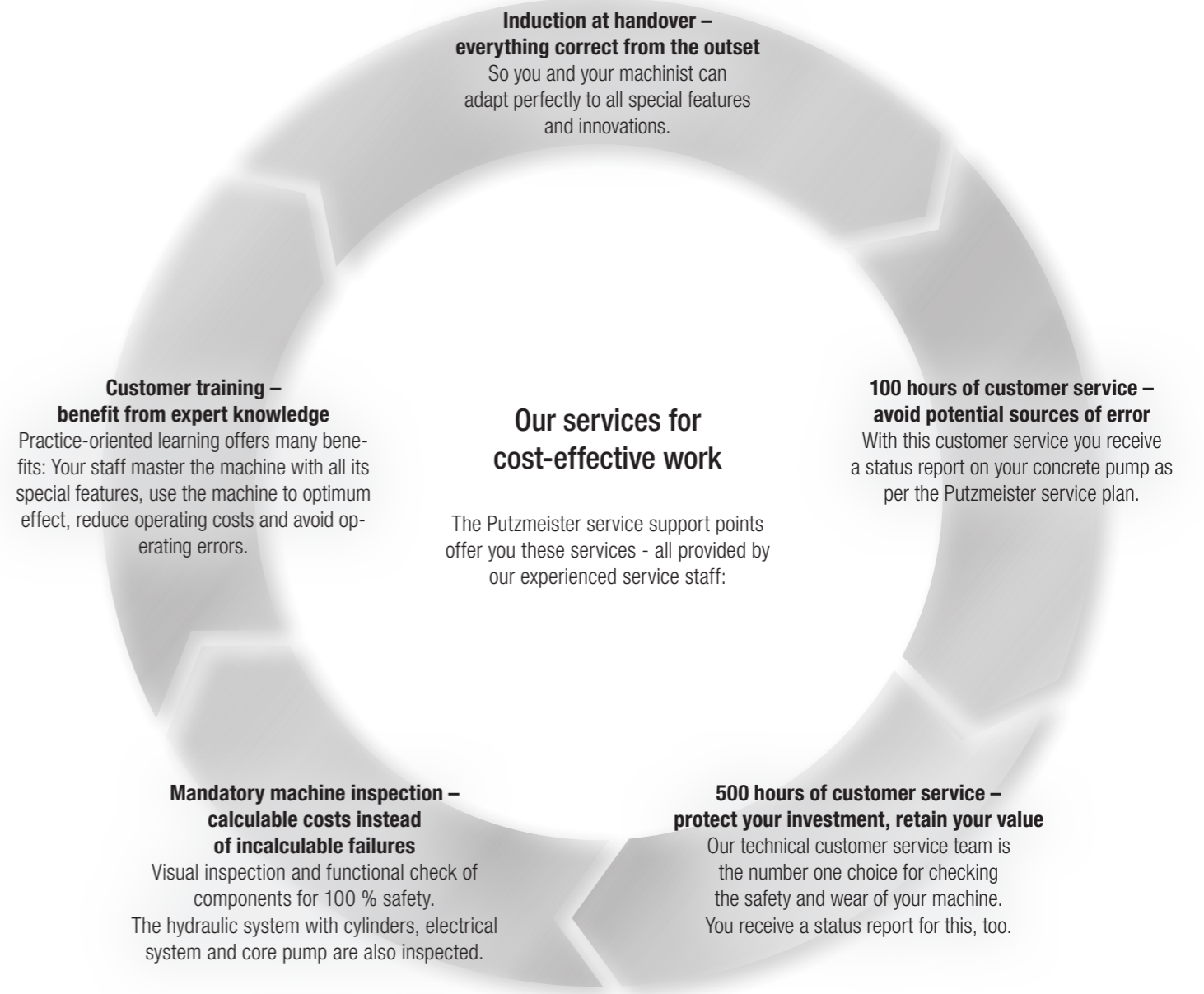
It goes without saying that we use only genuine Putzmeister parts in our workshops. This is the only way to guarantee consistent quality, checked for interoperability. And you can be absolutely sure that your machine meets the tough requirements with maximum performance and availability.



Excellent in quality and customer proximity

In case of need, you have two options: Either the service team visits you or you take your machine to one of our service workshops. The latest tools, software analysis solutions and genuine parts ensure that your machine is operable again immediately.

All Putzmeister workshops and the workshops of our international Putzmeister partners meet our high-quality standard. Especially when it comes to manufacturer's inspections and acceptance procedures in accordance with specifications.



Our range of training courses and seminars:

For concrete pump operators

- Training and development seminars on concrete pumps
- Training and development seminars on PUMI with piston and rotor pumps

- Regional/company seminars (in your region or on your premises)

For concrete pump mechanics

- Training and development seminars on concrete pump

For concrete pump machinists and mechanics

- Practical days in Aichtal
- Training: Handover and induction, on-the-job training

For workshop managers and foremen

- Overview of current developments in Putzmeister concrete pumps
- Qualification at the customer workshops for requisite maintenance work

Further information can be found at: www.pm-akademie.de



The 31-5 at a glance

Benefits for you at a glance

- Maximum manoeuvrability thanks to five arms and five hinges for optimum slip characteristics, in particular for renovation work in low buildings, inside buildings and under bridges
- Smooth placing boom thanks to intelligent laying of the delivery line and the harmonious development of the steel structure
- Efficient working thanks to logical, sophisticated ergonomics
- Even better safety thanks to comprehensive consideration of applicable standards and directives
- Service-friendly as a result of its optimised accessibility and consistent screw concept
- Lower service costs thanks to maintenance-free components, fewer different types of components (e.g. only three standard elbow types) and smaller quantities of functional fluids (fluid volumes reduced by 30%)



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