

# Truck-mounted concrete pump M47

Lightweight top-performance package on four axles

# Light in weight but heavy on benefits

More payload options and possible uses

Weighing less than 32 t, the M47 is one of the lightest in its class and provides more than sufficient payload reserve. The flexible 5-arm placing boom provides heavyweight performance and is extremely easy and safe to use. And on a four-axle chassis, it is astoundingly easy to move to the site of use.

The new machines are also setting new benchmarks in cost-effectiveness, dramatically reducing operating costs throughout the entire life cycle.

### 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 recognizes that your machine has important jobs to do.

#### Your Putzmeister Team

### The M47 in detail

#### Lower maintenance costs

The M47 enables you to work cost-effectively. On the one hand, it allows you to be far more economical with functional fluids and your working time.

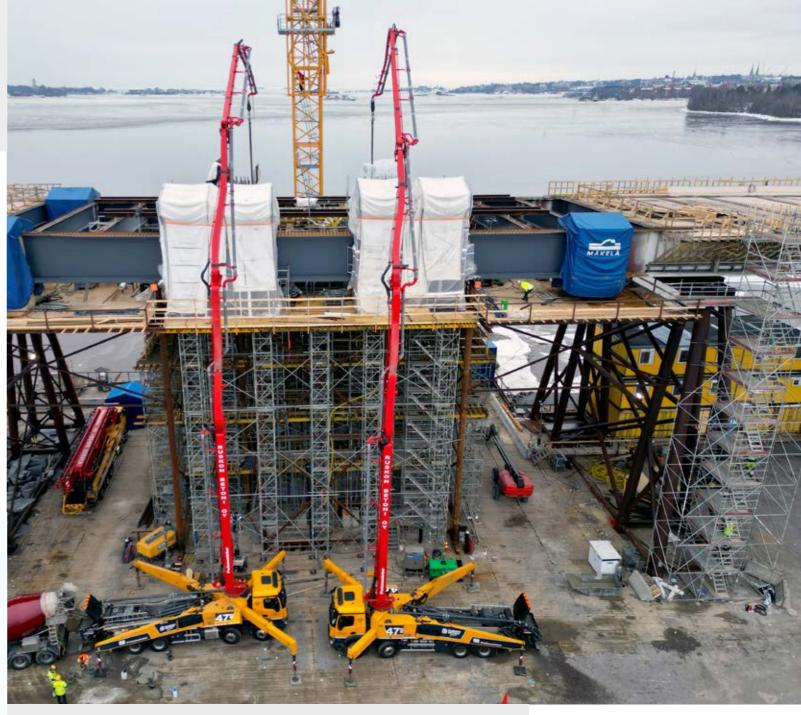
On the other hand, the reduced wear, daily maintenance and components optimized in terms of maintenance mean that the operating costs, service life and resale value are extremely attractive.

#### Perfect boom design

The 5-arm boom with roll-Z fold system has excellent slip characteristics. It can be deployed quickly and makes optimum use of the effective vertical reach of up to 47 m and thus also maximizes the range of jobs it can take on.

The intelligent laying of the delivery line and the stiffness of the steel structure keep placing boom vibration to a minimum. Concrete distribution is safer and efficient.





#### Space-saving support

The M47 is fitted with the support system developed and optimized by Putzmeister. This technology enables the telescopic front support legs to be adjusted to pre-defined support position. The rear support legs are fully flexible. This is particularly beneficial on construction sites where space is extremely limited.

#### **Reliable safety**

We have comprehensively taken into account all applicable standards and directives, providing an exceptionally high level of safety. This means that you are always driving and working on the right side of the law.

For example, iSC (Intelligent Setup Control), the support system from Putzmeister, meets the DIN EN 12001:2012\* standard.

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

## Great technology in use

Innovative solutions for high requirements – M47

A large horizontal reach, small support dimensions, convenient operation and powerful pumps for all common types of concrete - the ideal qualities for supporting day-to-day use. Furthermore, these truck-mounted concrete pumps are not deterred by strict licensing regulations. Their low unloaded weight provides additional load capacity for functional fluids and accessories. The wide flatbed with anti-slip surface provides sufficient space in this regard. Ergonomic steps on the hopper enable easy cleaning.



The wide flatbed with anti-slip surface offers a great deal of freedom of movement when working as well as simultaneously providing storage space.



A gross weight of less than 32 t provides a high capacity for payload and functional fluids. This ensures that the machines meet country-specific licensing regulations.

Clean: Optional end hose squeeze valve (EQV) for clean movements of the end hose on site. No concrete drips out of the end hose.

### The benefits are best seen during operation

- A gross weight of less than 32 t incl. sufficient reserves for payload and functional fluids
- **Smooth 5-arm placing boom** thanks to intelligent laying of the delivery line and the harmonious continuity of the steel structure
- Efficient working thanks to consistent sophisticated ergonomics and Ergonic<sup>®</sup> 3, the innovative control hardware and software
- Maximum safety thanks to comprehensive consideration of applicable standards and directives
- Service-friendly thanks to optimized accessibility and consistent screw concept
- Minimal service costs thanks to maintenance-free components, standardised wear parts (e.g. only four standard elbow types) and smaller quantities of functional fluids

The distortion properties are better in comparison to the rigid frame, and provide the same elasticity as the chassis frame. This makes driving a pleasure, and increases the service life of the truck.



## Putzmeister quality work in detail

Our sophisticated concepts save your money

How? Working in a team, we develop solutions that enable you to work cost-effectively, safely, conveniently and in an environmentally friendly manner. This includes, for example, the use of maintenance-free components, the automatic iSC support system and the centralized lubrication system and much more.



Innovation and quality can only be achieved with employees who think about their customers and about the future.

The machines are thoroughly tested in practice and on construction sites.



Maintenance-free components reduce operating and maintenance costs, for example thanks to wear-optimized standard elbows with long joins for maximum delivery line service life.



Combined centralized lubrication system: The electrical centralized lubrication system for hopper, A-hinge and four-point bearing ensures that the service life of the components that are subject to high stress is maximized without any additional work or expense. The optional centralized lubrication system on the boom means that the daily inspection process can be further streamlined. We all know that time is money.



The improved boom hydraulics conserve valuable resources and hydraulic fluid. The optimized response characteristics of the boom, on the other hand, save valuable working time, as it is ready for use more quickly.

The sophisticated design of the delivery lines also plays a part here, as it is distinguished by low-tension monofix mountings and arm bolts that can be undone on both sides.



#### Protection for the operator and the machine

Telescopic support legs that can be adjusted to pre-defined support position prove their value, particularly where space is extremely limited. iSC (Intelligent Setup Control), the support system from Putzmeister, ensures absolute control, enabling you to work flexibly in accordance with the EN 12001:2012 standard.

#### Better service

All four screwed support cylinders have an identical design, meaning that they can be repaired directly on site using simple tools.

It is also possible to easily replace the screwed pipe bracket as the positions of the pipe bracket and the guided delivery line are precisely defined.



#### Three defined support positions for the rear swinging support legs

Dimensions from the centre of the chassis: 1.50 m; 2.00 m; 4.70 m

#### Three defined support positions for the front telescopic support legs

Dimensions from the centre of the chassis: 1.25 m; 2.50 m; 4.20 m Numerous flexible support configurations are possible

## Skilful interaction – long-lasting performance

Pump, actuator, control system – trimmed for performance

Thanks to their ideally coordinated geometry, our concrete pumps are designed for all common types of concrete. The durable S transfer tube and the closed free-flow hydraulics circuit are essential for providing high performance with minimum consumption of resources. In addition, a new environmentally-friendly hydraulic fluid management system has been implemented.

#### EPS (Ergonic<sup>®</sup> Pump System) control system

EPS provides fully electronic regulation of the operation of the concrete pump, the motor and the placing boom. For you, that means:

- High machine availability thanks to high-quality components with low wear
- Optimized, smooth pumping process
- Reduced movement of the machine and boom
- With (Ergonic<sup>®</sup> Output Control), ideal motor speed for lowest consumption, wear and noise
- New EPS Plus (optional) offers three predefined hose pump programmes
- In addition, the agitator function can be automated (optional), depending on the pump control
- Fault management via EGD-RC (Ergonic<sup>®</sup> Graphic Display-Remote Control)



#### You choose the power

Like all Putzmeister truck-mounted concrete pumps, the M47 is available with different pumps with a delivery pressure of 85 bar: The 16H with two chromium-plated delivery cylinders (dia. 230 mm), which is cheaper in comparison, and the smoother 16HLS resp. 17iLS/19iLS (dia. 250 mm). They offer a delivery rate of up to 190 m<sup>3</sup>/h, but the LS version has a lower number of strokes and is thus subjected to less wear

#### The enhanced 17iLS/19iLS also offer numerous benefits and improvements:

- Fuel saving of up to 25 % with EOC 2.0 (field tested with multiple pumps for international applications)
  - More efficient pumping: Oil leaks prevented by improved sealing system
  - Better pump start-up behaviour
  - Longer service life thanks to robust S transfer tube bearing



#### Pumps

Туре	Output m³/h	Pressure bar	Stroke mm	Cylinder Ø S mm	Strokes/min
16 H	160*	85	2100	230	31
16 H LS 1	160*	85	2100	250	26
17 i LS	170*	85	2100	250	27
19 i LS	190*	85	2100	250	30

All data represent theoretical maximum values.

Rod/piston side. Max. output and max. delivery pressures cannot be operated at the same time. not for FFA

#### The S transfer tube ensures that even coarse mixes keep flowing

- The S transfer tube works quietly and quickly, even with stiff, wear-intensive coarse-grained mixtures
- Long service life and service intervals ensure a high degree of machine availability
- Extension of useful life thanks to mounted wear plates
- Easy replacement of the S valve
- Optimized switchover and reduced movement of the machine and boom

### The pump at a glance

- Pump geometry is optimally adapted to all common types of concrete
- Service-friendly control system with free flow hydraulics and thus consistently high hydraulic fluid quality
- Particularly wear-resistant S transfer tube design, which guarantees long service life
- **Optimized hopper** (screwed-in grille, improved shape and optimized S transfer tube storage)
- Agitator safety shutdown via RFID (Radio Frequency Identification), a detection system using electromagnetic waves, including start-up protection
- **Smooth, optimized pumping** with EPS and EOC protects the pump and the truck
- **Optimized switchover** with SN control and Push Over avoids wear-intensive pressure peaks
- Convenient and simple operation with Ergonic<sup>®</sup> 3, the latest concept for control hardware and software from Putzmeister
- Minimum operating costs thanks to maintenance-free components, good accessibility and significantly reduced volumes of fluid
- Easy replacement of components due to screw concept, e.g. support cylinder
- Optional agitator automatic system, whereby the direction of rotation corresponds to the pump direction
- Chrome-plated delivery cylinder particularly wear-resistant

## Ergonic<sup>®</sup> 3 – precise, intuitive and reliable!

Dedication in every respect

Ergonic® inside means that the machines are quickly ready for use and they work with high power, fuel efficiency and low wear. And most importantly for machine operators: Work becomes easy!







### The new Ergonic<sup>®</sup> 3 – clear, fast and safe

- 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.

Keeping an overview in every situation

- The "static" menu bar guides users through the menu – with no chance of "getting lost".
- Neatly and intuitively arranged functions.
- Simple menu structure with a maximum of two submenu levels.
- Main menu with all standard functions and additional details in submenus.

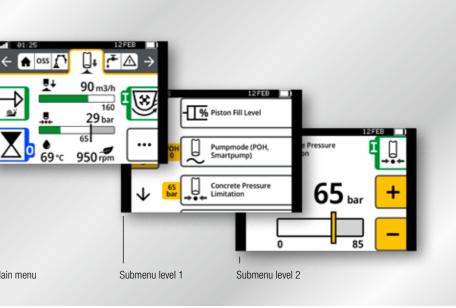
Main menu



The additional screen on the control cabinet uses the same concept and offers a variety of information, settings and options.



Pumping made smart If our concrete pumps form the heart of Putzmeister machines, then the Ergonic<sup>®</sup> 3 system is the brain.



### **Consistent concept** on all "switching centres"

- The menu structure is nearly identical on the remote control and the graphic display.
- Hardware and software are perfectly matched at all operating positions.
- The same intuitive operation on all Putzmeister products – without requiring a lot of training.

## iBC – intelligent Boom Control

## iSC – intelligent Setup Control

Intelligent boom control – an unrivalled dimension of convenience and precision

The performance level of a truck-mounted concrete pump is evident in how precisely, quickly and safely the boom can be moved and positioned. As a pioneer in intelligent boom control systems, Putzmeister has already demonstrated how user-friendly a concrete pump can be with the EBC.

With **iBC (intelligent Boom Control**), this system is now improved again – setting new standards for convenience and precision.



#### Extremely precise boom movements – iBC (intelligent Boom Control)

#### Unrivalled convenience

The patented iBC control system makes it easy for machine operators to control the boom with the joystick using just one hand. As a result, the end hose can be moved forwards, backwards or diagonally at the preselected height with a great deal of precision.

#### Unrivalled precision

The latest Putzmeister development is a big hit with machine operators: iBC made it possible to improve the boom's response characteristics and precision by another 80 %. The advanced boom damping delivers a stable, steady arm assembly at high delivery rates.

#### Unrivalled ease of folding

Folding and unfolding the arm assembly has never been this easy. With iBC, the boom movements are optimised for the exact machine model. Standard movements are carried out guickly and easily.







#### Increased limits thanks to FLEX base structure

The support provided for Putzmeister concrete pumps has become more and more flexible over the past years. For the swinging support legs, it is already fully flexible and offers a variety of intermediate positions for the forward support legs. The combination of iSC and the substantially optimised steel

geometry now enables a level of flexibility not seen before. With the new Putzmeister FLEX base structures\*, supporting and setting up the machines is no easier and more flexible than ever before - and therefore incredibly straightforward for machine operators.



Additional safety for complex obstacles

A maximum and minimum value can be specified for every hinge position. The intelligent teach-in function transfers the limits for the uppermost hinge to all others, for example to prevent collisions with the ceiling in low buildings.



#### Our most supportive system ever – iSC (intelligent Setup Control)

With the iSC (intelligent Setup Control), Putzmeister is raising the stability of concrete pumps to a whole new level. The successor to the proven ESC system offers a significant improvement in terms of machine reach and flexibility.

#### On the safe side – now more than ever

- Maximum versatility Optimum support options to suit the space available on-site. Even in the most difficult of conditions.
- **Maximum reach** Perfect interaction the reliable reach prediction allows machine operators to utilise the robust steel structure of Putzmeister machines to their fullest potential.
- **Maximum safety** 100 % safety, no small print. Guaranteed stability in any situation. The patented drop warning and the possibility of providing additional support help machine operators in difficult conditions.



\* Gradual introduction starting at bauma 2022, depending on the market-specific configuration.

Safe support at a glance Clearly structured figures in real time, intuitive operation and a radio remote control make setting up on the construction site quick and easy.

### M47

### Placing boom M47

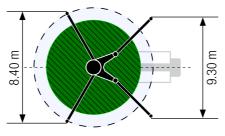
Folding type	ype5-arm Roll-Z fold system (RZ)		
Vertical reach	46.1 m		
Horiz. reach	41.1 m gross		
Depth of reach	32.4 m		
Unfolding height	11.1 m		
End hose length	3 m (standard) / 4 m (restricted)1		
Delivery lines	DN 125		
Slewing circle	365°		

#### General

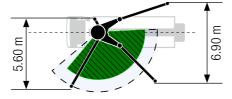
Support width	front	/ rear	
Standard	8.4 m	/ 9.3 m	
OSS	5.6 m	/ 6.9 m	
iSC	2.6 - 8.4	m / 2.6 m – 9.3 m	
Overall length	11.9 m		
Height	under 4.0 m		

<sup>1</sup> e.g. without end hose squeeze valve and dual-section end without concrete brake Support width based on center of support leg

#### Standard – Full support

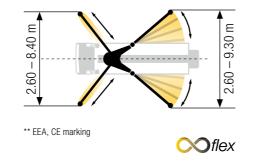


OSS\* – One-side support



\* non EEA, no CE marking

iSC\*\* – Full-flexible support



#### **Equipment lines**

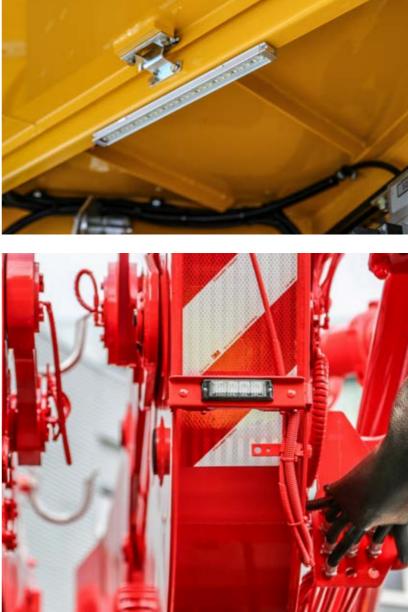
To make it easier to select from the numerous configuration options, three equipment lines, as well as a few option packages, are available.

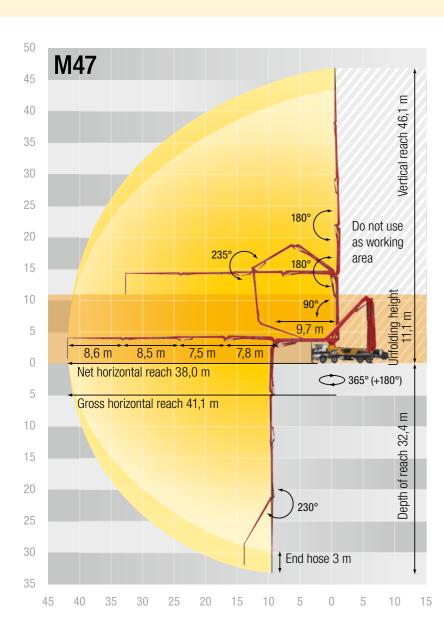
#### Standard line

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**

lighting comfort.





The high line provides easier operation, reduce maintenance costs and increased

#### Exclusive line

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





## 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 provide continuous training for our service technicians, 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 guality, checked for interoperability. And you can be absolutely sure that your machine meets the tough requirements with maximum performance and availability.

#### Excellent in quality 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.

#### Customer training benefit from expert knowledge

Practice-based learning offers a host of benefits: Your employees master the machine with all its special features, use the machine to optimum effect, reduce operating costs and avoid operating errors.

### Our services for cost-effective activities

you these services - all provided by our experienced service employees:

#### Mandatory machine inspection calculable costs instead of incalculable failures

Visual inspection and functional check of components for 100 % safety. The hydraulic system with cylinders, electrical system and core pump are also inspected.

#### Our range of training courses and seminars

#### For concrete pump machinists

- Training and development seminars Concrete pumps
- Training and development seminars PUMI with piston and rotor pumps
- Regional / company seminars (in your region or on your premises)

#### For concrete pumps mechanics

 Training and development seminars Concrete pumps

#### 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





#### Induction at handover everything correct from the outset

So you and your machinist can adapt perfectly to all special features and innovations.

#### 100 hours of customer service avoid potential sources of error

Our customer service team provides you with a status report on your concrete pump as per the Putzmeister service plan.

The Putzmeister service support points offer

#### 500 hours of customer service protect your investment, retain your value

Our technical customer service team is the number one choice for checking the safety and wear of your machine. You receive a status report for this too.



## M47 at a glance

- A gross weight of less than 32 t incl. sufficient reserves for payload and functional fluids
- Smooth 5-arm placing boom thanks to intelligent laying of the delivery line and the harmonious continuity of the steel structure
- Efficient working thanks to consistent sophisticated ergonomics and Ergonic<sup>®</sup> 3, the innovative control hardware and software
- Maximum safety thanks to comprehensive consideration of applicable standards and directives
- Service-friendly thanks to optimized accessibility and consistent screw concept
- Minimal service costs thanks to maintenance-free components, standardised wear parts (e.g. only four standard elbow types) and smaller quantities of functional fluids
- The I frame follows the distortions of the chassis: less distortion and longer service life
- Flexible, space-saving TRDI support system, in particular, significantly reduced extent of supports when using OSS and iSC



Hinweis: The diagrams in the brochure do not necessarily correspond to the full scope of standard equipment for the machines. Further brochures: Ergonic® 3 CT 5013



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