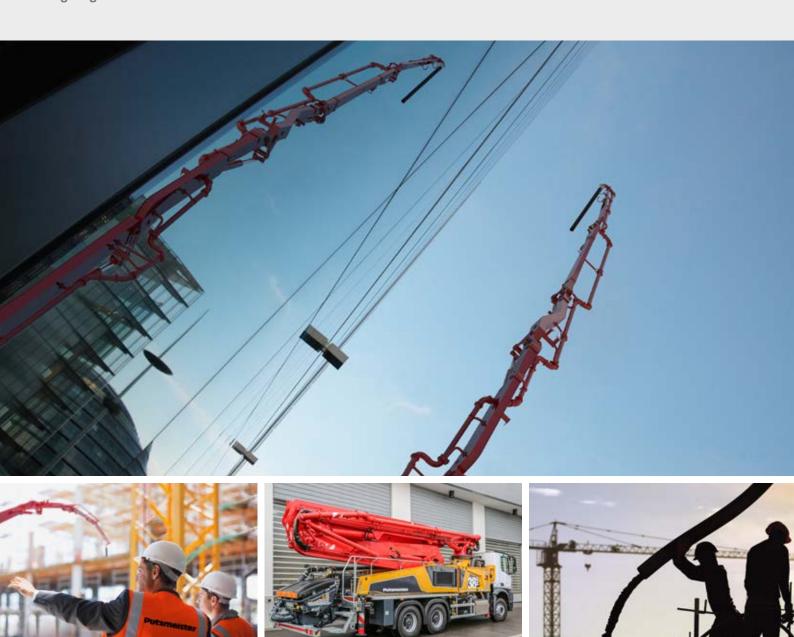
Putzmeister Concrete Pumps GmbH | P.O. Box 2152 | 72629 Aichtal | Tel. +98 224 286 75-8 | Fax +98 224 228 78 | +98 0912 8 584 584 kormit.abedi@yahoo.com Right to make amendments reserved | © by Putzmeister | All rights reserved | Printed in Germany | 1707 www.saghargostar-co.ir





Truck-mounted concrete pump M38

All-round talent on 3 axles

Versatile, powerful, robust – the highlight of any job site



Our masterful best-seller – the M38

It's not for no reason that the M38 is our best-selling truck-mounted concrete pump, satisfying customers all over the world. But we're not using this as an excuse to rest on our laurels - it's an incentive to keep developing our all-round talents. Thanks to its robust pedestal, this machine is even more stable; it is also more flexible to support

and more convenient thanks to new functions. What's more, it offers a particularly extensive range of standard equipment. Ergonic® 2.0 has been improved with the help of huge amounts of customer feedback so that you can work cost-effectively and efficient on almost every job site.

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The Putzmeister promise

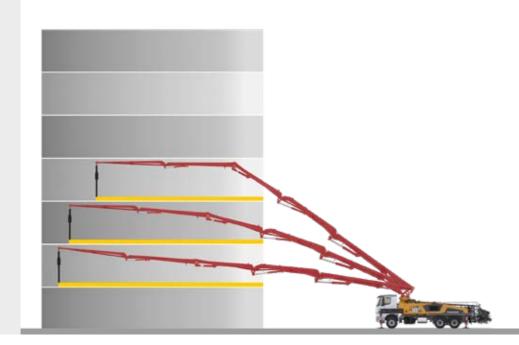
The name Putzmeister stands for machines that enable you to work with extreme productivity and go beyond purely being competitive. To this end, we provide extraordi-narily innovative technologies alongside top quality and excellent service. We are fully dedicated to supporting you both around the world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

Your Putzmeister Team

The placing boom – uniquely flexible in any application

Approx. 38 m vertical reach using 5 arms optimally

The boom of the M38 is incredibly agile. This is an advantage which comes in handy on any job site, even indoors. After all, 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 M38 with an RZ-folding placing boom a successful combination of flexibility and compactness.



Precise, easy and safe to operate

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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ergonic



Maximum capacity utilisation, minimum maintenance costs

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 time and money.

Fewer movements needed, increased service life

Thanks to combination lubrication, the machine operator does not need to climb on the machine – the M38 lubricates the first placing boom cylinder and the slew bearing and hub independently. This is not just faster and more cost-effective; it also increases the service life of components under significant stress..

Robust and maintenancefree components

- + Combined auto lube system
- + High wear resistance
- = Maximum durability



The new boom at a glance

- Approx. 38 m vertical reach with 5 arms in roll-Z fold system
- No dead space, more flexibility
- Lower unfolding height, optimum slip characteristics
- Fast response characteristics of boom control
- Safety thanks to reduced boom vibration
- EBC for vibration damping, onehanded control and limitation of workspace (optional)
- Electric combination lubrication for first placing boom cylinder and the slew bearing and hub
- Standard 90° and 45° elbows, with lengthened collars for a longer service life

The pedestal – robust and stable for optimum reliability



Stable on three axles

The M38 fulfils the strictest approval regulations when it comes to its weight, too. It offers plenty of additional load reserve for functional fluids and accessories. There is sufficient storage space available thanks to extended swinging support legs and the wide flatbed with an anti-slip surface. Additional details make the base structure particularly robust: The clamping length of the front telescopic support legs, the closed rear swinging support legs and the boom pedestal, which is compact and made of a single piece of material.



Stands steady in every location

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.

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. This has the important effect of ensuring that its total reach on the fully supported side is optimally used.

- * OSS Assistance device for One-Side-Support, optional.
- ** ESC Safety system for One-Side-Support (as per EN 12001:2012).

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Cost-effectiveness with a long 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.

Built on economy

Maintenance-free components, a comprehensive screw concept for simple delivery line replacement or for easily retrofitting options, for example, as well as a wide range of standard components additionally help to keep operating and maintenance costs low and easy to calculate.



The new pedestal at a glance

- Low unladen weight offers high weight reserves
- Plenty of storage space thanks to long swinging support legs
- More robust and more stable base structure due to a number of innovative details
- Flexible, space-saving TRDI support system
- Significantly reduced support widths with the use of OSS* and ESC** for restrictive setup conditions
- Saves money thanks to maintenance-free components, comprehen-sive screw concept, standard components and I-frame concept for improved distortion characteristics

The concrete pump – clever interaction of all components

Strong unit for every type of concrete

Concrete pumps from Putzmeister are designed for all common types of concrete with their coordinated geometry. This is thanks to the closed free flow hydraulic circuit, among other things. The drive transfers more power and saves resources because the oil reaches the cylinder with minimal losses. In addition, the Ergonic® blue, the new Putzmeister concept for improved sustainability, integrates a new hydraulic fluid management system into the control system.

This new technology not only enables the necessary quantity of hydraulic fluid to be reduced by up to 50% — it also allows the use of environmentally friendly organic fluid. A further success factor is the S transfer tube point, which has a long service life even with wear-intensive materials. Because the S transfer tube was reinforced with build-up welding.



Optimal coordination thanks to EPS

The computer-aided control system of the pump ensures a better performance via EPS (Ergonic® Pump System). EPS controls the pumping process using computers, so that it is smoother overall and the boom vibrations are reduced. Besides EPS, EOC (Ergonic® Output Control) is an effective module to work efficiently. Because EOC controls the

engine speed with lower fuel consumption, wear and noise. Unfavourable areas are automatically avoided. The same applies to the SN control system and Push Over.

They ensure that the concrete column is pushed very gently and wear-intensive pressure peaks are avoided.

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 high oil 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
- Convenient and simple 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



You choose the power

Like all Putzmeister truck-mounted concrete pumps, the M38 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 (dia. 250 mm). They both offer a delivery rate of 160 m³/h resp. 170 m³/h, but the LS version has a lower number of strokes and is thus subjected to less wear.

The enhanced 17iLS also offers 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-tube bearing

Pumps

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
17 i LS	170*	85	2 100	250	27

All data represent theoretical maximum values



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

Ergonic[®] 2.0 – designed by operators for operators

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.









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, highresolution 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.

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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: 1.50 m; 2.25 m; 4.05 m (fully flexible)

Four defined support positions for the front telescopic support legs Dimensions from the centre of the chassis: 1.10 m; 1.85 m; 2.60 m; 3.00 m (Numerous flexible support configurations are possible)

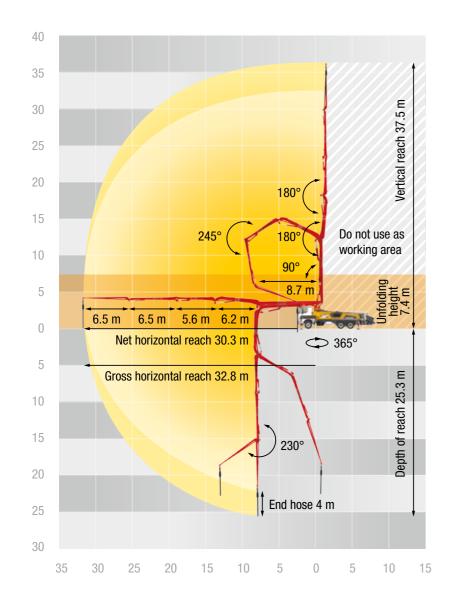


The benefits at a glance

- Light and ergonomic
- High resolution display
- Two symbol styles to choose from: Scribble or technical
- New menu for setting dimming and time
- New Li-ion batteries with charge level display and 8 h capacity
- Plus cable operation
- Backlit buttons
- Shorter start-up time
- Robust electronics

- With a practical waist harness
- 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
- All information available at machine operator's work-place
- Optimised EOC

Technical Data M38



Placing boom

Folding system	5-arm roll-Z fold system
Vertical reach	37.5 m
Horizontal reach	32.8 m gross
Depth of reach	25.3 m
Unfolding height	7.4 m
End hose length	4 m
Delivery lines	DN 125, max. 85 bar
Slewing circle	365°

General

Standard 6.0 m / 8.1 m ESC 4.3 m / 5.6 m OSS 4.3 m / 6.3 m Overall length 10.8 m Height under 4,0 m	Support width	front / rear		
OSS 4.3 m / 6.3 m Overall length 10.8 m	Standard	6.0 m / 8.1 m		
Overall length 10.8 m	ESC	4.3 m / 5.6 m		
	OSS	4.3 m / 6.3 m		
Height under 4,0 m	Overall length	10.8 m		
	Height	under 4,0 m		

Support width based on center of support leg

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.

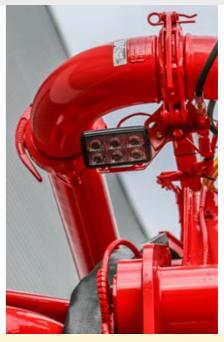
High line

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

Exclusive line

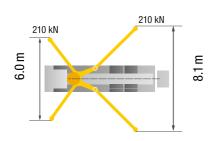
This line represents the highest equipment level offered by Putzmeister. It includes selected premium components.



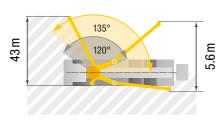




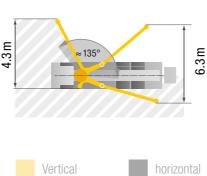
Standard



ESC



0SS





Added value for the same money

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

Putzmeister Concrete Pumps GmbH | P.O. Box 2152 | 72629 Aichtal | Tel. +98 224 286 75-8 | Fax +98 224 228 78 | +98 0912 8 584 584 • Operating kit 1 - EBC Basis kormit.abedi@yahoo.com Right to make amendments reserved | © by Putzmeister | All rights reserved | Printed in Germany | 1707 www.saghargostar-co.ir

- 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
- 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

12 13

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.

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.

Induction at handover everything correct from the outset

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

Customer training benefit from expert knowledge

Practice-oriented learning offers many benefits: Your staff 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 work

The Putzmeister service support points offer you these services - all provided by our experienced service staff:

100 hours of customer service avoid potential sources of error

With this customer service you receive a status report on your concrete pump as per the Putzmeister service plan.

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.

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.



All Putzmeister workshops and the

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 M38 at a glance

Benefits for you at a glance

- Smooth 5-arm placing boom with RZ-folding, optimum flexibility, lower unfolding height and optimum slip characteristics
- Versatile use on job sites, whether operating in low buildings, concreting ceilings, working on base plates, etc.
- Efficient working thanks to logical, sophisticated ergonomics
- Use on almost any job site thanks to flexible support
- Robust and stable due to reinforced base structure, compact boom pedes-tal, boom line installation, etc.
- Maintenance- and 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





Putzmeister Concrete Pumps GmbH

$$\label{eq:max-energy} \begin{split} &\text{Max-Eyth-Straße 10} \cdot 72631 \text{ Aichtal / Germany} \\ &\text{Postfach 2152} \cdot 72629 \text{ Aichtal / Germany} \\ &\text{Tel. } +49 \text{ (7127) 599-0} \cdot \text{Fax } +49 \text{ (7127) 599-520} \\ &\text{pmw@putzmeister.com} \cdot \text{www.putzmeister.com} \end{split}$$

