

Truck-mounted concrete pump 42-5

Cost-friendly versatility on 4 axles



Putzmeister

The new 42-5 pays off – construction site after construction site



Get more for less

The new 42-5 is an investment where you get everything you need. Everything which has been tried and tested over decades, which we have newly developed based on our experience and expertise and everything which you, your operators and your customers have expected from us. The result is not less than a completely new generation of concrete pumps.

It was your desire for even more efficiency and our ambition which prompted us to rethink the entire machine in terms of its operating costs and redesign components as required. The implementation will reflect extremely positively on your balance sheet. Not only over the short term, but also over the long term throughout the entire working life. We were also able to satisfy your desire for improved operating comfort and flexibility in the day-to-day use on the construction site.

Never better than today – the 42-5!

A truck-mounted concrete pump must, first and foremost, prove itself in everyday use - every day, in every application. The 42-5 has an extremely high spectrum, which ranges from medium-sized to large construction sites and also does not give up when faced with restricted set-up situations.

How is that possible? With excellent flexibility, which the 5-arm boom in a compact roll Z-folding offers. With operation which leaves nothing to be desired thanks to the computer-based control with EPS, EOC and EBC (optional) including the comfortable radio remote control system. With a balanced load distribution on 4 axles, as well as our TRDI support, which always allows the vehicle to move legally in traffic or set-up safely at the place of use. Details on everything which we have forgotten to mention here can be found on the next few pages.



Your benefits at a glance

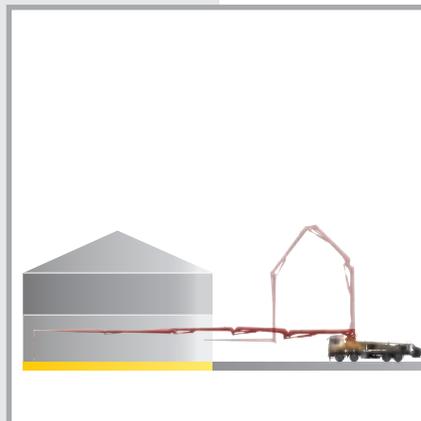
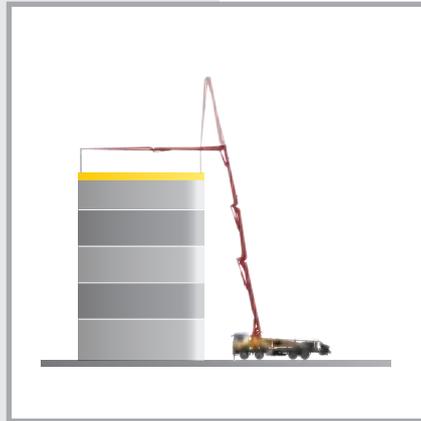
- **A gross weight of less than 32 t** incl. sufficient reserves for payload and operating materials
- **Smooth 5-arm placing boom** thanks to intelligent laying of the delivery line and the harmonious development of the steel structure
- **Efficient work** through consistently clever ergonomic design
- **Even better safety** through closer consideration for current standards and guidelines
- **Service-friendly** as a result of its optimised accessibility and consistent bolted concept
- **Lower service costs** thanks to maintenance-free components, fewer different components (e.g. only 3 standard delivery line bends) and lower volumes of operating materials (oil volume reduced by 30%)

The placing boom – 42 m flexibility up to top of the boom

For (almost) all applications

42-5, this is 42 m vertical reach distributed over 5 arms with compact design in roll Z-folding. 5 arms, this means a high degree of versatility in applications. For example, when reaching into buildings, the hinge of the fifth boom is crucial to reaching fully into the building interior. The optimised kinematics ensure that the workspace is maximised and there is no “dead space”.

The 5-arm placing boom in roll Z-folding is the successful combination of flexibility and compactness. With a very low unfolding height, optimum slip characteristics and optimal use of the net horizontal reach, you have almost unlimited application possibilities. The advantages of the roll and the Z-folding are thus combined in an extremely efficient way.



Clever and practical

Also where space is tight, the direct response characteristics of the optimised boom control and the lightweight design ensure precise and comfortable work. The minimal boom vibrations also in the case of high delivery rates facilitate the placing of the concrete and guarantee the required safety. The elaborate laying of the delivery lines and the harmonious development of the steel structure ensure this.

The supplementary equipment EBC (Ergonic® Boom Control), a fully electronic control system for the placing boom, provides even more comfort. The integrated vibration damping eases the burden on operators thanks to constantly smooth guidance of the end hose. And the boom can be moved even more smoothly using the joystick in one-handed operation. The restriction of the workspace or the blocking of arm positions increase the operational reliability.

ergonic®
inside



The new boom at a glance

- **Approx. 42 m vertical reach with 5 arms in roll Z-folding**
- **No dead space**, enhanced flexibility
- **Direct response characteristics** of boom control
- **Safety** thanks to reduced boom vibrations
- **EBC (optional)** for vibration damping, one-handed control, restriction of workspace
- **Standard delivery line bends of 90° and 45°** with extended collars on both sides for longer service life
- **Low unfolding height**

Top-class with standardisation

Your machines work efficiently when they are used at full capacity. This also includes versatile use and optimal availability. The costs for service and maintenance must be kept low. With this in mind, we have once again optimised the new series. Only components with a high wear resistance, as well as maintenance-free components where possible or many standard components, were installed. For example, we have reduced the bend types in the boom from 7 to 3 standard delivery line bend types. And standard screwed-in pipeline supports save time and money when aligning the delivery line. The good accessibility make service and repair work easier, quicker and more cost-effective.



The substructure – firm base for massive performance



Efficient on 4 axles

The excellent torsion properties and enhanced flexibility in the substructure make a significant contribution to enhancing the driving comfort and service life of the machine. The 42-5 easily satisfies strict country-specific licensing regulations because its lightweight design allows additional loads for fuel and accessories. The wide platform with anti-slip surface offers sufficient space in this regard.

The new substructure at a glance

- **Lightweight design** offers high weight reserves
- **I frame concept** for improved torsion properties and longer service life
- **Flexible, space-saving TRDI support system**
- **Significantly reduced support widths** with use of OSS and ESC (Ergonic® Setup Control)
- **Less obstacles in the surrounding area**, such as traffic for example





Less space – improved safety

More effort also means more costs. The tooling times should therefore be kept to a minimum. With the TRDI support developed by Putzmeister you save time and space, without compromising on safety.

Construction sites often only offer restricted set-up conditions, because they are located in urban areas or along busy roads. Double telescoping support legs can also be securely placed in minimal spaces between obstacles. And with the optional OSS* (One Side Support) and ESC (Ergonic® Setup Control)** the considerably small support width of under 8 m is further reduced. An important side effect: Full use is made of the net horizontal reach for the fully supported side.

* OSS – assistance system for One Side Support, optional

** ESC – safety system for One Side Support (i.a.w. EN 12001:2012).

Concept for longer service life

Another benefit of TRDI lies in the force distribution. If the machine is supported correctly, then it stands freely on its legs. Forces are not distributed to the vehicle frame, but are distributed over the support legs. The vehicle is protected and the service life increased.

The new I frame and connection concept also ensures a longer service life in comparison to fixed frames. Maintenance-free components, the new comprehensive screw concept, as well as the consistent use of standard components, also play a role in reducing the operating and maintenance costs.



The concrete pump – top marks in geometry



Because the ratio is right

Concrete pumps from Putzmeister are designed for all common types of concrete with their coordinated geometry. This is thanks to the closed loop of the free flow hydraulics, among other things. This drive transfers more power and saves resources because the oil reaches the cylinder with minimal losses. In connection with the new Putzmeister concept for modern oil management, the oil volume was reduced a full 30 %.

A further success factor is the S-tube point, which has a long service life even with wear-intensive materials. Because the S-tube was reinforced with hard layer welding. The service intervals are considerably longer and the availability of the machine is higher than for other systems.

So much power

Similar to all Putzmeister truck-mounted concrete pumps, with the 42-5 different pumps with 85 bar conveying pressure are also available to you: the 16 H with a chromium-plated delivery cylinder (Ø 230 mm), which is cheaper in comparison, and the smoother 16 H LS (Ø 250 mm) with 160 m³/h delivery rate, however, with a lower number of strokes and thus less wear in the LS version. You are therefore able to base your offer entirely on the requirements of your customers.

Benefits 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-tube switch**, which guarantees long service life
- **Optimised hopper** (screwed-in grille, improved shape and optimised S-tube storage)
- **Agitator safety shutdown via RFID** (Radio Frequency Identification), a detection system with help of electromagnetic waves, including start-up protection
- **Smooth, optimised pumping** with EPS and EOC, protects the pump and the vehicle
- **Optimised switchover with SN control and Push Over** avoids wear-intensive pressure peaks
- **Comfortable operation** with display and radio remote control system
- **Lower operating costs** thanks to maintenance-free components, avoidance of special components and good accessibility
- **Improved replacement of components** with bolted concept

Technology that helps savings

The logo for 'ergonic inside' features the word 'ergonic' in a black, sans-serif font with a stylized orange and yellow target symbol for the letter 'o'. Below it, the word 'inside' is written in a smaller, red, lowercase sans-serif font.

Here nothing is left to chance, because success can be controlled. Thanks to the computer-based control via EPS (Ergonic® Pump System), which is integrated as standard in all models, the excellent performance and comfortable handling of the concrete pumps are guaranteed. EPS controls the pumping process electronically, so that it is smoother overall and the boom vibrations are reduced. The pump data is optimally coordinated with EPS and adapted to the respective application.

Besides EPS, EOC (Ergonic® Output Control) is an effective module to work efficiently and save. Because EOC controls the engine speed with lower fuel consumption, wear and noise. Unfavourable areas are automatically avoided. EOC is included in EPS and thus integrated as standard in all pumps.

The same applies to the so-called SN (Surge Neutralizer) control and Push Over. They ensure that switchovers are optimised and wear-intensive pressure peaks are avoided. In addition to the reduction of boom vibrations, they extend the service life of the drive, delivery line and mounting.

Simplicity is better

Everything under control and always the best overview. This is simple and comfortable with the EPS-controlled pump because the graphic display and the radio remote control system facilitate the operation and ensure transparency. At the EGD (Ergonic® Graphic Display) the driver can view all relevant machine data and set or adjust individual parameters. Thanks to a reliable fault management system, the machine can be fully operational in the event of a fault, and even in emergency operation.



42-5

With the Putzmeister 42-5 we offer you a machine which already boasts an extremely comprehensive range of equipment as standard. With the diverse optional equipment, you can also adapt your range of services to the needs and requirements of your customers.



Supplied as standard:

Ergonic® (EPS, EOC and EGD with fault management)
Hopper centralized lubrication system

Optional

Vibrator can be positioned as required thanks to the bolted grille
OSS (One Side Support) and ESC

Radio remote control system with display and additional cable remote control

Wide range of lighting systems

Rotatable 45° delivery line bend with long collars

Bypass filter for even better oil quality

Spacious platform

EBC (Ergonic® Boom Control)

Water tank with 800 l

Collapsible underride guard with lighting

Agitator safety shutdown via RFID with start-up protection

Compressor

Connections for emergency supply

Ergonomic work platform

Chromium-plated delivery cylinder

And much more ...

Collapsible underride guard (optional)

Service

- **Service points** in over 150 countries across the globe
- **24-hour emergency service** in Germany
- **Tested original parts with warranty** and a 24-hour delivery service
- **Status and diagnosis data via Ergonic® Tele Service (ETS)** with transfer to separate workshop or Putzmeister service partner

- **Manufacturer's inspection in accordance with the requirements of the VDMA (German Engineering Federation)**
- **Individual training courses and seminars** in the Putzmeister Academy
- **Competent advice and planning support** for large projects, e.g. for concreting logistics, concreting processes and concreting technology by Putzmeister project engineers of CPD (Concrete Project Division)

If you have any further questions we are happy to answer them:

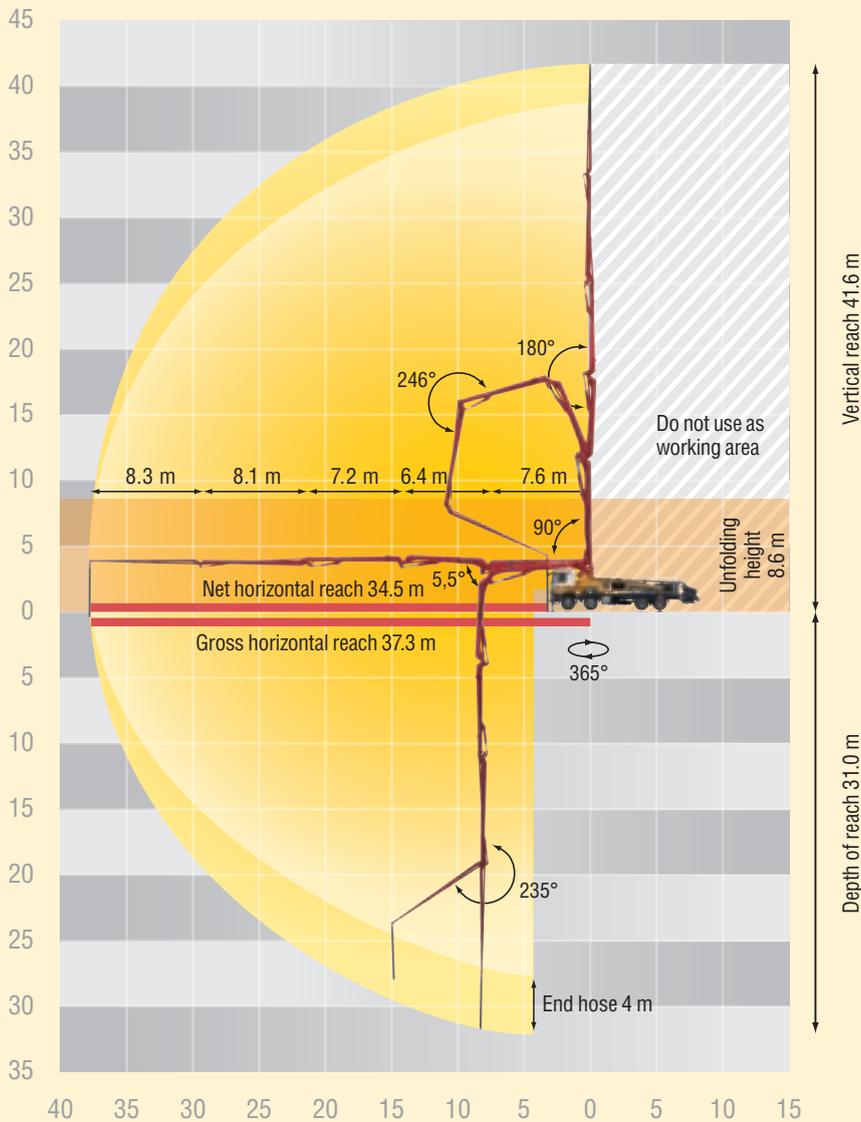
spareparts@pmw.de
(for questions on spare parts)
services@pmw.de
(for technical questions)

Technical data – Placing boom

Folding type	5-arm roll Z-folding (RZ)
Vertical reach	41.6 m
Horizontal reach	37.3 m (gross)
Depth of reach	31.0 m
Unfolding height	8.6 m
End hose length	4 m
Delivery lines	DN 125, max. 85 bar
Slewing circle	365°

Technical data – General

Support width	front / rear
normal	approx. 7.5 m / approx. 7.9 m
OSS/ESC*	approx. 4.8 m / approx. 6.2 m
Overall length	approx. 11.5 m
Height	under 4.0 m

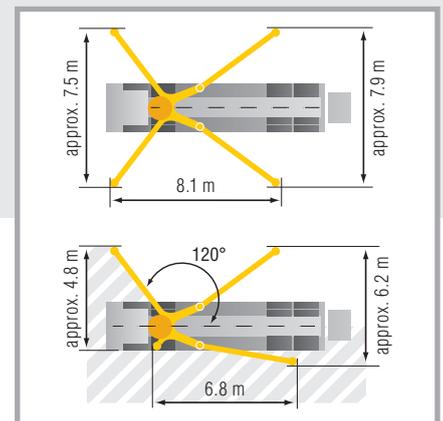


Technical data – Pumps

Type	Delivery rate m ³ /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 represents theoretical maximum values
Max. delivery rates and max. concrete pressures cannot be operated at the same time.
Standard boom pipework: Pressure up to max. 85 bar.

* ESC (Ergonic® Setup Control) – safety system for One Side Support (i.a.w. EN 12001:2012); availability and scope of functions depend on machine model.
OSS (One Side Support) – assistance system for One Side Support. Availability depends on machine model.
Not authorised for the European Economic Area (EEA).



Dimensions are model-dependent and may vary. Gross weight depending on equipment and chassis ≤ 32 t

The 42-5 at a glance

- **A gross weight of less than 32 t**
incl. sufficient reserves for payload and operating materials
- **Smooth 5-arm placing boom**
thanks to intelligent laying of the delivery line and the balanced development of the steel structure
- **Efficient work** through consistently clever ergonomic design
- **Even better safety** through closer consideration for current standards and guidelines
- **Service-friendly** as a result of its optimised accessibility and consistent bolted concept
- **Lower service costs** thanks to maintenance-free components, fewer different components (e.g. only 3 standard delivery line bends) and lower volumes of operating materials (oil volume reduced by 30 %)



Note: The diagrams in the prospectus do not necessarily correspond to the full scope of standard equipment for the machines.
Further prospectuses: Ergonic® 3763



Putzmeister Concrete Pumps GmbH
Max-Eyth-Straße 10 · 72631 Aichtal
Postfach 2152 · 72629 Aichtal
Tel. +49 (7127) 599-0 · Fax +49 (7127) 599-520
pmw@pmw.de · www.putzmeister.com



Putzmeister