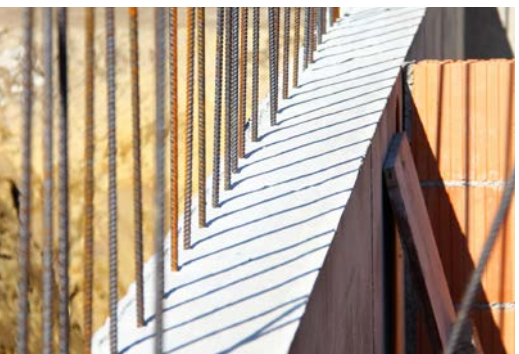




**Putzmeister**



# PUMI<sup>®</sup> 25-4/28-4 NEW Generation

Infinately variable support, reach everything, work with comfort

# PUMI® 25-4/28-4 NEW Generation – Success from flexibility

## Placement is just like support – simple, flexible, versatile

Our PUMI®s 25 -4 and 28-4 NEW Generation are causing a stir with exciting innovative features. The Variable Support System, which offers incredible flexibility not only in confined setup situations, is an absolute necessity for today's job sites.

### Safe support

The ESC (Ergonic Setup Control) system from Putzmeister controls the interaction between support and boom to ensure flexible and safe full, narrow and variable support.

### 4-arm placing boom

The 4-arm placing boom with Z-fold offers optimised slip characteristics. The perfected kinematics enlarges the spatial working range and prevents "dead space".



## Putzmeister Guarantee

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

# PUMI® NEW Generation – Space miracle and cost saver

## High performance in a small space

Compact and lightweight, the PUMI® is agile and rated for a high payload. It is used in places where truck-mounted concrete pumps are too expensive, too big and inflexible. Or wherever truck mixer conveyors are not adequate.

Especially cost-effective on small job sites of approx. 20 m³ and wherever space is tight – in towns and cities, residential areas and production halls.

Hose lines provide the ideal equipment for interior refurbishing work. It also feeds truck-mounted concrete pumps and crane buckets and accomplishes other truck mixer tasks with ease.

Nothing stands in the way of maximum capacity.



## A broad range of potentials

Choose from various PUMI® designs: With a reach height of 25 m and 28 m distributed over 4 arms, with rotor or piston pump and constructed on a standard chassis.

**PUMI® 25-4 S**

**PUMI® 28-4 S**

**PUMI® 25-4 Q**

**PUMI® 28-4 Q**

**PUMI® 25-4 CS**

**PUMI® 28-4 CS**

## Protects the environment, conserves resources and is easy on the budget

The PUMI® is extremely eco-friendly and that pays off. This operation is permitted by a new drive concept and larger hydraulic pump. The machine works at optimum engine speed to achieve the best possible pump performance.

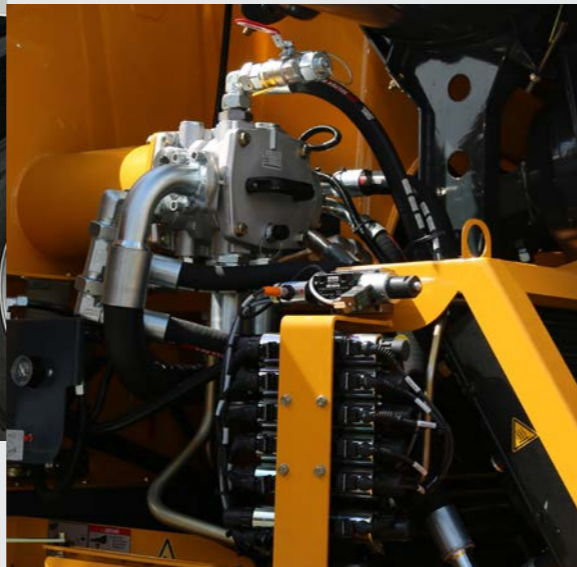
This optimised engine speed reduces exhaust and noise emissions and cuts diesel consumption. The new hydraulic concept dramatically reduces oil consumption. All in all, this protects the environment and is easy on the budget.

# Altogether more design, more flexibility and more workplace convenience



The unique variable support offers a long reach and a high level of safety even in confined setup conditions

Thanks to a powerful hydraulic pump and a new filter concept, the new PUMI® Generation needs less hydraulic oil and pumps at a lower engine speed. The result is a lower diesel and oil requirement.



The 4-arm placing boom offers optimised slip characteristics and maximum reach

## Uniform operating concept – simple and intuitive operation

The new operating concept employed for the PUMI® is based on the tried and proven Ergonic 2.0. A control system which is already used successfully in mobile concrete pumps (M38). The clear information flow, including the graphic display of the working ranges, simplifies operation.



The new lighting concept for illuminating the operating points and the support ranges offers not only comfort, but also more safety around the machine



The torsion-resistant, integral frame reduces wear, cuts costs, and ensures stability, especially during the pumping operation. Ideal force dissipation from boom to frame and into the stabilisers

# Into the comfort and safety zone with Putzmeister

## Assistant concepts support the machine operator in action

- Speed-dependent working light cut-out for increased safety while travelling on the road
- Temperature/frost warning system prevents malfunctions being caused by frozen water
- Warning function "Remote not in cab" (optional) means the radio remote control is never left on the job site
- Support cradle switch as reliable standardised pressure switch with signal into the cab prevents the machine being driven off with the arm assembly raised
- Automatic depositing of the end hose for simple operation



## Safety concept protects man and machine

- Variable support with ESC (Ergonic® Setup Control) system for reliable support, even on confined job sites
- New lighting concept – illumination of all operating positions and the support areas
- Oversize cleaning platform with standard guardrail
- Reversing camera (option)
- Manual emergency operating points for core pump, boom and mixer for fast and simple recovery in case of need



## Operating and maintenance concepts reduce running costs

- Central lubrication with various lube points, electronic hopper grease lubrication system
- Electro-hydraulically adjustable chute as standard for simple operation
- Continuous and flat user-friendly platform with plenty of space for hoses, base plates, chutes etc.
- Putzmeister standard components (spectacle wear plate and ring, pressure connection, delivery piston, agitator motor, water box) cut running costs
- Cleaning platform with large area for ease of cleaning



# The PUMI® NEW Generation support – Spoilt for choice

## The more constricted the job site, the more tangible the advantages

The PUMI® NEW Generation offers three different support expansion stages to suit different requirements.

The frontal and standard support is standard equipment. These stages are suitable for applications where setup space is adequate.

The Ls/Rs support is used on smaller job sites where setup conditions are usually constricted.

The highest expansion stage is the innovative stepless support. This offers maximum flexibility in the smallest space.

All four stages feature the Putzmeister ESC system. The working range created by the support is indicated to the operator on the remote control display.

## How the support with the Putzmeister ESC system works

1. Park the PUMI® at the place of use
2. Support in line with the job site conditions
3. The display clearly shows the release of the support and the permissible ESC-protected working ranges
4. The boom is ready to start



Display view:  
Support and working range

## Putzmeister safety system without variable support

### A) Frontal support

Setup is simply via the four support cylinders at the front and rear, without extending support legs. This creates a minimum support spanning 2.6 m of vehicle width.



### B) Standard support

The machine is fully supported. A working range of 360° is fully available. The working range at the front is 4.3 m.



## Putzmeister safety system with variable support

### C) Ls-/Rs support\*

In addition to the minimum and full support, this optional function also permits narrow support on one side of the machine. This reduces the working range at the front to 3.4 m.



### D) Variable support\*

The front stabiliser is supported steplessly. This optional function therefore permits all support variants in the range of 2.6 m to 4.3 m.



Illustrations and descriptions contain options

# 4-arm placing boom – Effectively greater movement range

## 4 arms for improved slip characteristics

The 4-arm placing boom with Z-fold offers optimised slip characteristics, and hence maximum versatility in use.

**Maximum effectively achievable reach**  
When slipping in the building, the 4th arm joint can be the key to getting right inside. The optimised kinematics also ensure that the horizontal and spatial working range is maximised.

**Straightforward handling**  
The direct response characteristics of the boom control guarantees precise, convenient operation. Minimised boom vibrations and stepless boom speeds in all operating modes facilitate placement. The automatic fold-in mechanism with threading aid ensures a soft impact on the boom cradle.

## EBC Basis – Productivity through vibration damping

The steady end hose can easily be guided by one hand and the concrete is cleanly placed. Arm speed can be individually specified by the operator. The convenient fold-in and fold-out aid with automatic support cradle function reliably prevents damage to boom and vehicle.

## EBC Plus\* – Full control in just one hand

The boom range can be controlled and limited down to the finest detail by the programmable rotating mechanism and vertical corridor, as well as by the single axle limiting and blocking function. Add to that the ability to define the boom speed individually.

\* in addition to EBC Basic



Illustrations and descriptions contain options



## Choice of optimum pump lines

The PUMI® 25-4 is available with delivery line diameters of 100 mm and 125 mm in one or two layer pipes. (PUMI® 28-4 with DN 100)

## The benefits at a glance

- Around 25 or 28 m vertical reach with 4-arms
- Optimal slip characteristics thanks to 4-arms Z fold
- More flexibility without “dead space”
- Direct response characteristics of the boom control
- Minimum boom vibrations for added safety
- Even more convenience by EBC (optional) with vibration damping
- Automatic fold-in mechanism for gentle, simple support cradle (optional)
- Range of delivery line diameters (DN100/ DN125) for the PUMI® 25-4
- Two delivery line qualities: 1-layer or 2-layer pipes

# Innovative design – Focussing on the distribution of force

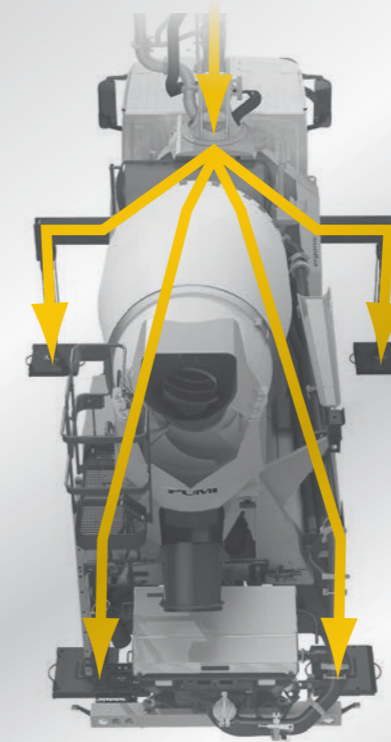
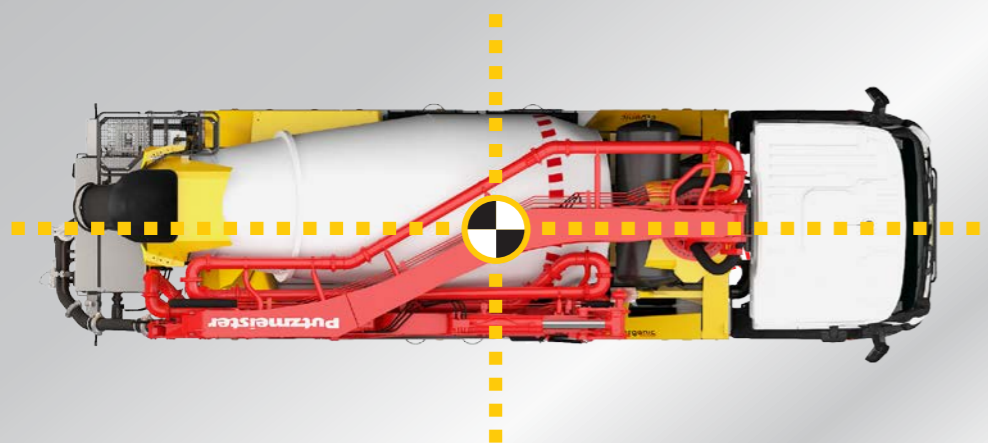


## Weight distribution plays a vital role

Our aim was to use the maximum possible useful load to the full while respecting the permissible total weight. This load was to be evenly distributed across the 4 axes. And we did it.

The ingenious arrangement of the new shape-optimised mixer drum, the placing boom and the concrete pump on the chassis produces a perfect centre of gravity.

As a result, the chassis is protected and the service life is maximised.



## Ideal force transfer means less wear

The torsion-resistant integral frame ensures optimum force transfer from placing boom to frame and then into the support feet. This protects the machine. Wear and the associated costs are minimised. The frame also keeps the machine stable, especially during the pumping operation.

## The benefits at a glance

- Streamlined mixer drum **optimises load distribution** across the axles
- **Ideal force transfer** thanks to torsion-resistant integral frame protects the machine
- **Maximum load capacity** for concrete, tool, hoses and water

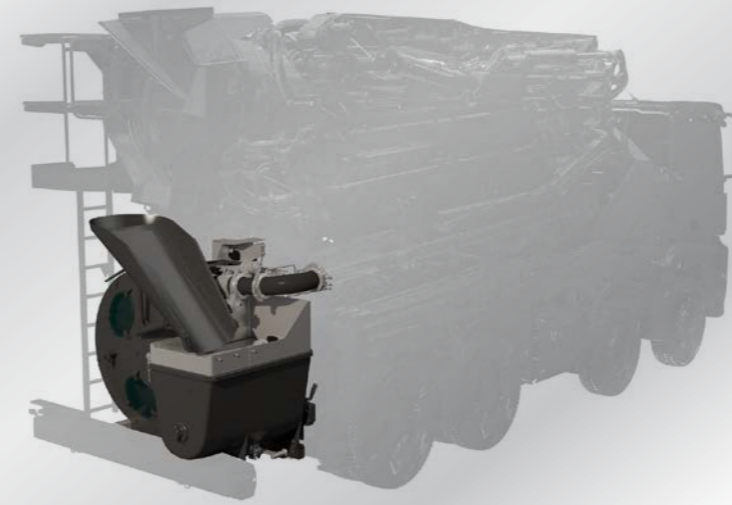


# Pumps – The finest range as made for coarse consistencies

## Rotor or piston pump – both strong, each to its own

Our PUMI® NEW Generation is also available with an incredibly broad range of pumps. Rotor or piston pump mounted transversely or longitudinally. Each version ideally suited to your particular application.

To help you choose, below are the specific characteristics of each system at a glance.



## Q-rotor pump

The rotor pump is the most compact of the PUMI® concrete pumps. When mounted to a truck, there is a short overhang and a maximum angle of slope – especially advantageous on difficult terrain.

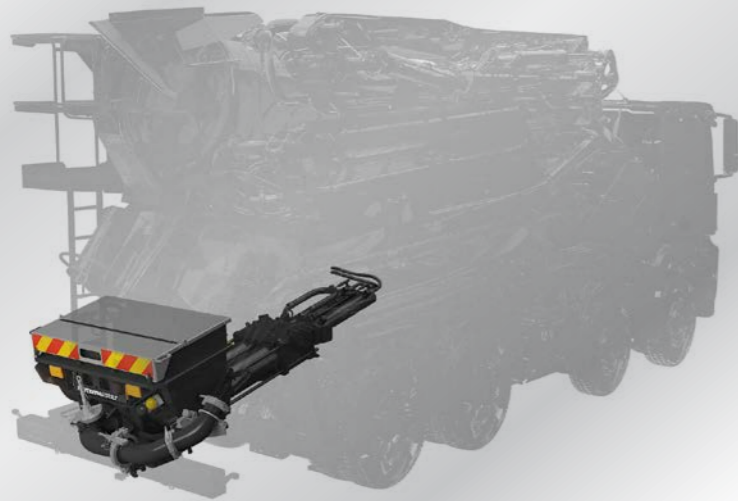
A side outlet is provided for pumping over hose lines. Hoses of 20 to 30 m and even longer can be used, allowing greater distances to be managed with ease.

## Advantages of the piston pump

- **S-pump optimally suited for refurbishment work**
- **Rugged hopper with large discharge opening** (bolted grille, optimised shape and S-pipe mounting)
- **Smooth pump behavior** and low wear with EPS (Ergonic® Pump System)
- **Service-friendly control system** with free flow hydraulics and the associated consistently high oil quality
- **Highly wear-resistant S-pipe switch design**, guaranteeing long service life
- **Optimised access** for maintenance and service
- **230 mm diameter delivery cylinders** achieve good suction performance and a high degree of fill
- **Agitator safety cutout via RFID** (Radio Frequency Identification), including restart protection

## Advantages of the rotor pump

- **Minimal wear parts**
- **Pumps the most difficult materials**
- **Almost no residues**
- **Quick and easy to clean**
- **Side outlet (optional)** for hose connection (20 –30 m)
- **Smooth pump operation minimises noise**
- **Infinitely adjustable output from 0 to 58 m³/h**



## S-piston pump

The PUMI® NEW Generation features a completely new S-piston pump. With its application-optimised output of 83 bar and a pump capacity of 70 m³/h, this pump is ideal for typical PUMI® job sites and also where hose extensions are used.

Key advantages of the new S-pump include good access, delivery piston replacement via the water box, side outlet on the elbow for connecting hoses and the 2-way folding hopper cover.



## CS-piston pump

### The convenient off-roader

The CS-piston pump offers maximum ground clearance and an angle of slope with minimum overhang.

### Accessible for all work

Easy to maintain and service, since all maintenance points are readily accessible. In addition, the swiveling hopper clears the way to the delivery cylinders.

## The pump types at a glance



**Rotor pump Q**  
transversely mounted



**Piston pump CS-transfer tube**  
transversely mounted



**Piston pump S-transfer tube**  
longitudinally mounted

	Rotor pump Q transversely mounted	Piston pump CS-transfer tube transversely mounted	Piston pump S-transfer tube longitudinally mounted
<b>Output* (m³/h)</b>	58	56	70
<b>Pressure* (bar)</b>	25	57	83
<b>Rotor hose Ø (mm)</b>	125	–	–
<b>Delivery cylinder Ø (mm)</b>	–	230	230
<b>Stroke (mm)</b>	–	700	760
<b>Rotor speed (rpm)</b>	35	–	–
<b>Strokes per minute</b>	–	32	37

\* All data are maximum theoretical values. Max. outputs and max. delivery pressures are not possible at the same time.

# Ergonic® 2.0 Control – Because efficiency can be controlled

## Tuned for perfect performance

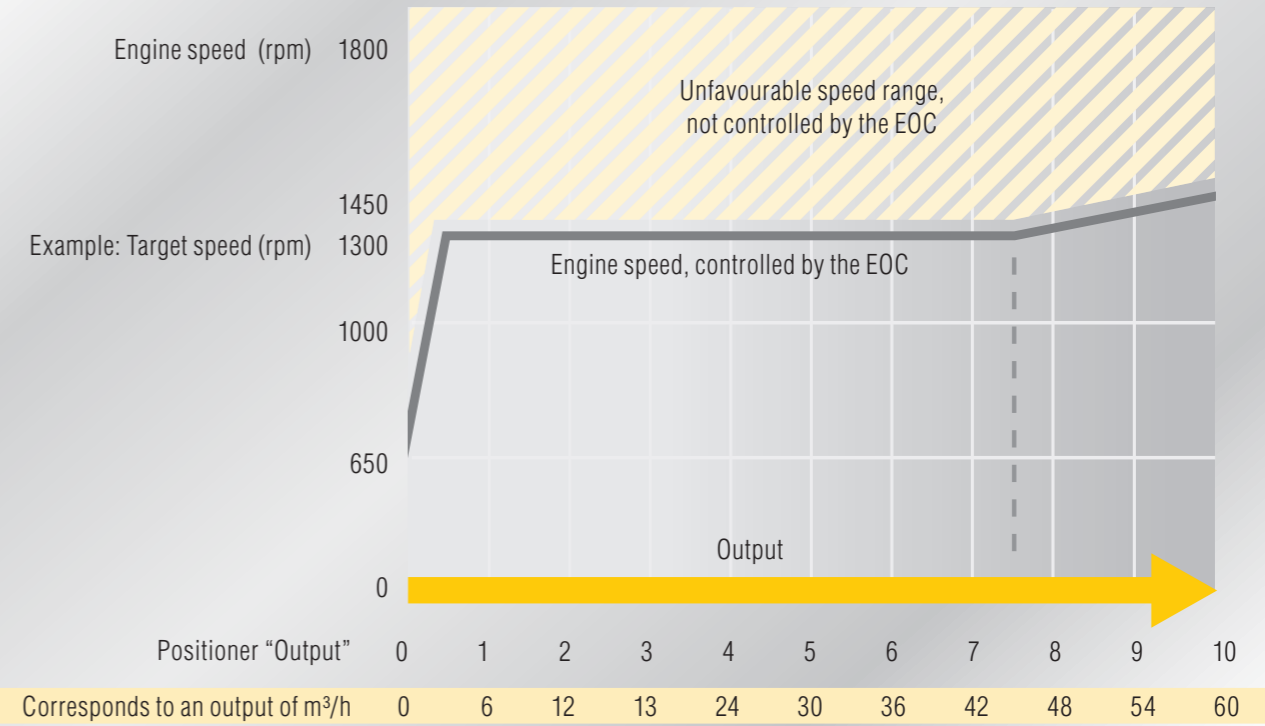
Ergonic® inside – means the optimised fully-electronic control system and control of concrete pump, placing boom, mixer drum and vehicle engine.

### What you get

Your machines are ready for work in a faster time, achieve a higher placement performance, are economical and low-wear – with the simplest of operations.

The PUMI® 25-4 and the 28-4 NEW Generation are fitted with the Ergonic® 2.0 control. The EPS (Ergonic® Pump System), EMC (Ergonic® Mixer Control), EOC (Ergonic® Output Control) and EBC (Ergonic® Boom Control) modules are integrated.

**ergonic**  
inside



\* Rated speed depends on concrete pump type and vehicle requirement.



## EOC (Ergonic® Output Control)

The EOC achieves optimum control of the engine speed with minimum fuel consumption, wear and noise. Unfavourable operating points are avoided automatically. If the boom is not moving and the pump is switched off, the machine returns to idling speed. This strategy cuts fuel consumption by up to 10 percent.

## EPS (Ergonic® Pump System)

The EPS control monitors and regulates in a fully-electronic manner. The result: fewer hydraulic components, i.e. less wear and lower energy consumption, a harmonious and smooth flow of concrete minimises boom and machine vibrations and optimises productivity. Because all pump data, such as delivery pressure, output and many others are optimally coordinated. In addition, the double-protected control permits emergency operation.

### Silence function – less noise on and around the job site

On our PUMI®, the EPS function reduces pressure and changeover peaks through the integrated "silence function". The result is a smoother running pump, softer start-up and fewer strokes with the same delivery capacity thanks to a greater degree of fill.

## The benefits of Ergonic® at a glance

- Fully-electronic control of the concrete pump
- Reduced machine vibrations
- Pump parameters optimally matched to one another
- Transfer tube changeover matched to concrete consistency (piston pumps)
- Fewer hydraulic components
- Fault management
- Double-protected control permits emergency operation
- Silence function reduces noise
- Simple, clear operation
- EPS (Ergonic® Pump System) – Smooth pump behaviour and minimal wear
- EMC (Ergonic® Mixer Control) – Mixer drum operated via the remote control (see p. 20)
- EOC (Ergonic® Output Control) achieves optimal engine speed for minimum fuel consumption (-10 %), wear and noise
- EBC (Ergonic® Boom Control) – Controls and regulates the placing boom for improved performance and simpler, safer operation (see p. 13)



Illustrations and descriptions contain options

# The NEW Generation operation – Uniform, clearly arranged, intuitive

## All functions and information to hand

The rotary and push buttons are remarkably easy to operate. The placing boom is conveniently controlled via two joysticks, or by single-handed control with just one joystick in EBC mode.

### Cable remote control – the reliable substitute

If use of a radio remote control is not permitted, it can be connected to the control cabinet and hence to the cable remote control via the cable supplied.

### Ergonic® Mixer Control (EMC)

The EMC makes the PUMI® operator's job very easy; he can operate the mixer drum simply via the radio remote control. He conveniently controls the drum functions and rotating speeds, as well as water addition and cleaning from his location.



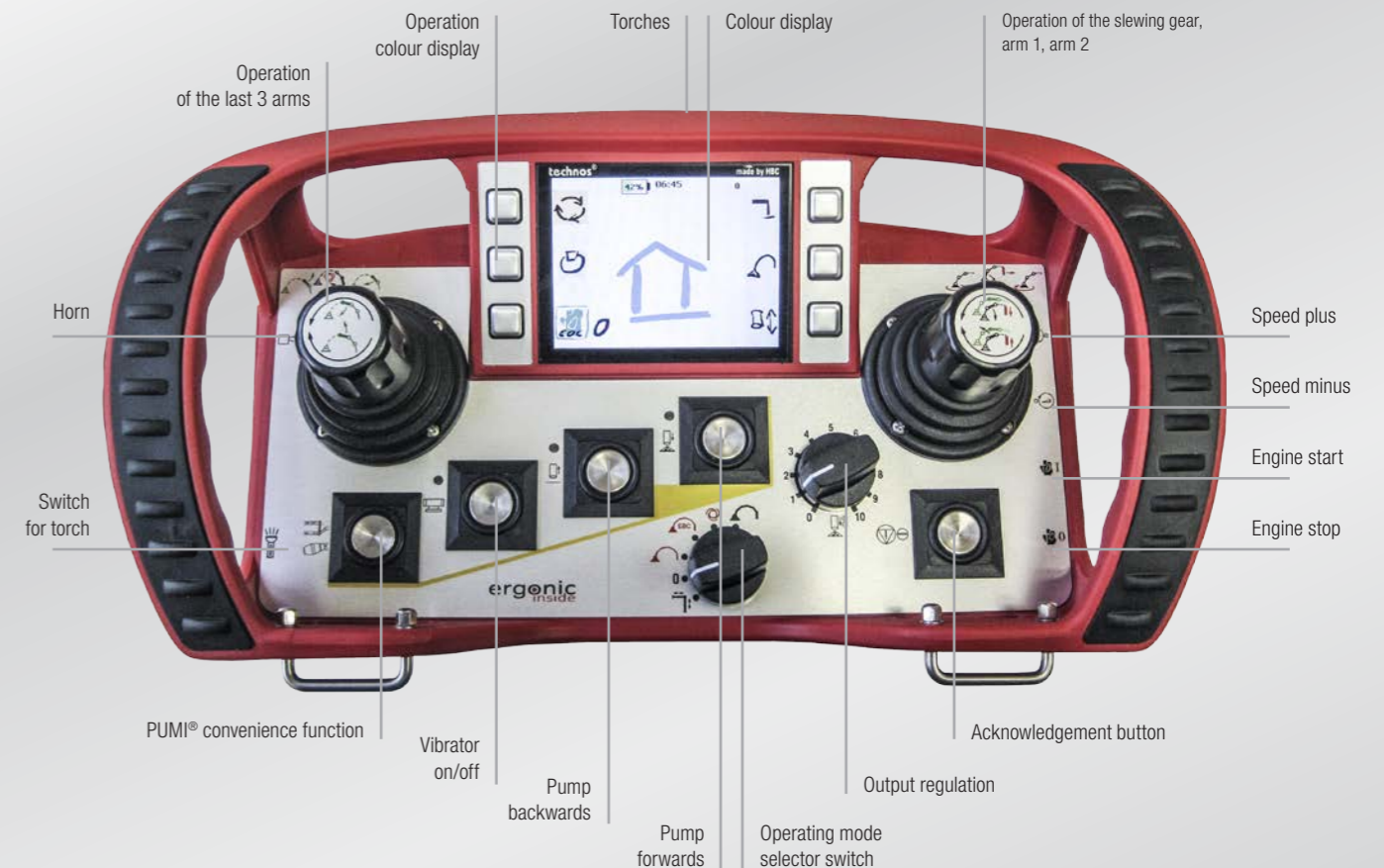
Chip for changing over the remote control

## Simply easier work

The latest Ergonic® 2.0 generation sits very light in the hand. It weighs 30 percent less than Generation 1.0. And it ticks a few more boxes too.

## Ergonic® radio remote control 2.0

- **Ergonomic boom control** via two joysticks
- **Convenient one-handed control** (only with EBC) takes the pressure of the machine operator
- **EBC functions operated** from the radio remote control
- **Can also be used as a cable remote control** (e.g. if radio is prohibited)
- **Simple changeover** of radio remote control by replacing the machine chip
- Lithium-ion battery permits **up to 17 hours of operation**
- **Optimum transparency** with modern menu guidance and 3.5" colour display
- **Tight and rugged** with encapsulated electronic circuitry
- **Better safety on the job site** with the integrated torch function
- **Including mixer functions (EMC)**



## EGD-RC – Ergonic® Graphic Display-(Radio) Remote Control

### For transparency and manageability

At the EGD-RC, the machine operator can configure all relevant machine data, such as engine speed, oil temperature and concrete pressure, or see any malfunctions, fault messages and blockages and set individual parameters.

### Availability you can rely on

A reliable failure management system with a double-protected control (electronic and hydraulic) ensures that the machine is fully operational during malfunctions and even in emergency operation.

Thanks to simple chip replacement, the radio remote control can be replaced in case of fault.

### Left side



### Right side



# The PUMI® has what others would like to have

## Equipment lines

To make it easier to choose from the numerous configuration options, two extensive equipment lines (Standard Line and High Line), as well as various option packages are available.

### Standard Line

This line includes components which Putzmeister considers the economic standard for working effectively and safely.

Combined with the "EU/DE road approval" option package, this machine is ready for use anywhere in Europe.

### High Line

Simplifies operation, cuts maintenance costs and improves lighting.



The rear area is always in view thanks to the reversing camera with display in the truck cab



## Same cost, added value

In addition to improved clarity and a simplified ordering procedure, the option packages are cheaper than ordering individual options.

- **DE/EU road approval kit**  
This package includes all the equipment required to have the machine approved in the EU.
- **Lighting kit**  
Machine lighting over and above the lighting provided as standard.
- **Technology kit**  
Includes the automatic agitator function and the optimised control of the concrete pump for hose pumps or other applications.
- **Operation kit 1 – EBC (Basis)**  
Reduces vibrations for even smoother boom movement
- **Operation kit 2 – EBC PLUS**  
Convenience function for boom control
- **Cleaning kit**  
Various components that make machine cleaning easier
- **Camera kit 1 to 3**  
Various camera systems, from the reversing camera to the 360° camera
- **Individual options**  
Other individual options available

# PUMI® 25-4/28-4 NEW Generation – Innovation meets tried and proven technology

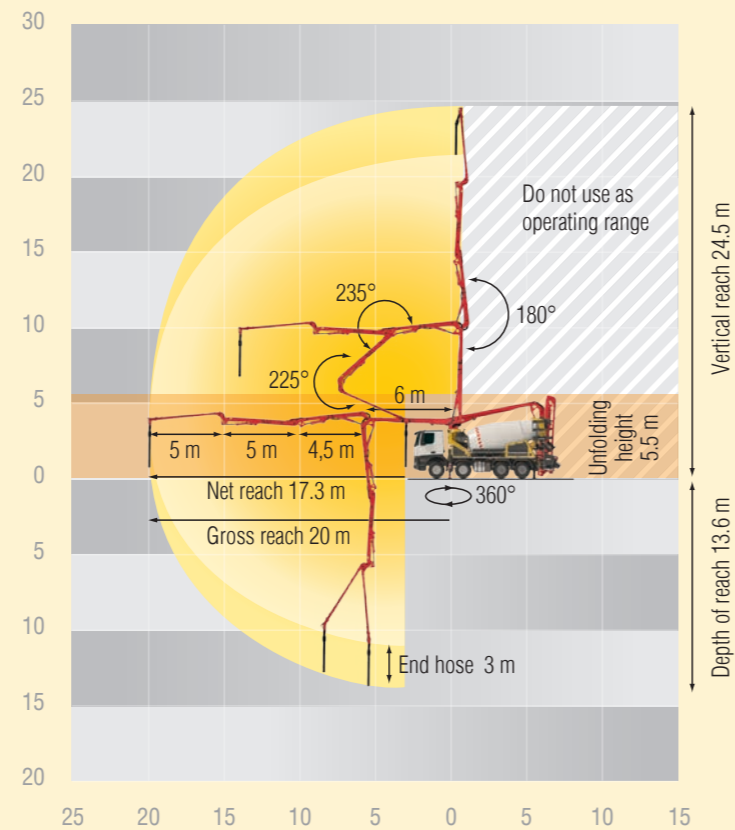
## Best equipped for every application

Whether PUMI® 25-4/28-4 Q with compact, low-noise rotor pump or 25-4/28-4 S and/or CS with powerful piston pump – we offer you machines that make your work easier. All versions have a infinitely variable support, a 4-arm boom, a new lighting and operating concept, Ergonic® 2.0 and many other innovations.

So you always make the right choice.

Illustrations and descriptions contain options

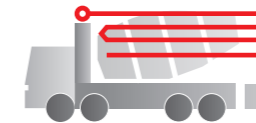
### PUMI® 25-4



### PUMI® 25-4

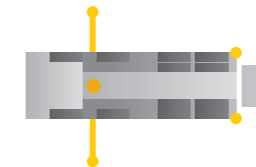
#### Placing boom TMM 25-4

Folding system	4 arm Z-folding
Vertical reach	24.5 m
Gross reach	20.0 m
Net reach	17.3 m
Depth of reach	13.6 m
Unfolding height	5.5 m
Length of end hose	3 m
Delivery line	DN 125 / 5.5"
	DN 100 / 4.5"



#### Extent of support (with full support)

Front	4.3 m
Rear	2.6 m



#### Truck mixer

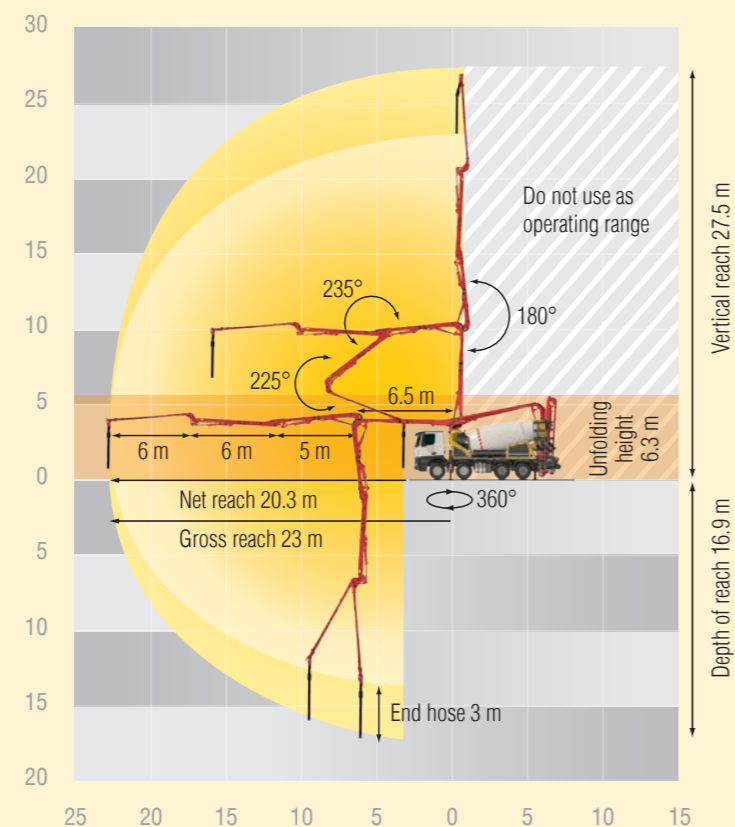
Rated fill	7 m³
Drum speed	1–14 rpm
Water tank	630 l



Available pump types: CS, Q, S (see Page 17)



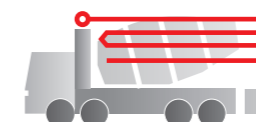
### PUMI® 28-4



### PUMI® 28-4

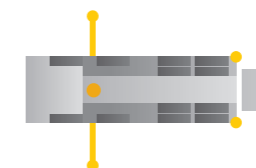
#### Placing boom TMM 28-4

Folding system	4 arm Z-folding
Vertical reach	27.5 m
Gross reach	23.0 m
Net reach	20.3 m
Depth of reach	16.9 m
Unfolding height	6.3 m
Length of end hose	3 m
Delivery line	DN 100 / 4.5"



#### Extent of support (with full support)

Front	4.3 m
Rear	2.6 m



#### Truck mixer

Rated fill	7 m³
Drum speed	1–14 rpm
Water tank	630 l



Available pump types: CS, Q, S (see Page 17)



# 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

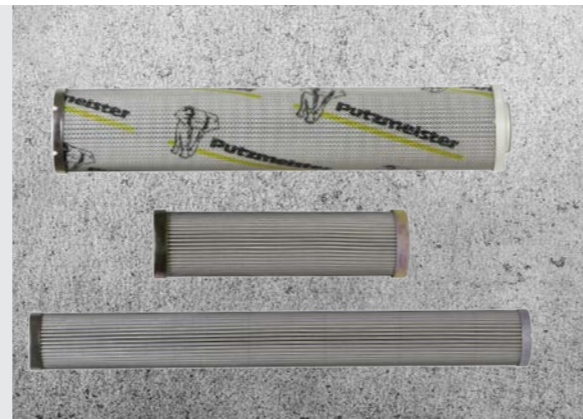
We provide continuous training for our service technicians, provide a close-knit information network and the latest equipment and consistently strive to meet our customers' needs.

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 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 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.



### 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-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.

### 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.

## Our services for cost-effective activities

The Putzmeister service support points offer 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.

### 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.

## 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

Further information can be found at: [www.pm-akademie.de](http://www.pm-akademie.de)



# PUMI® 25-4/28-4 NEW Generation at a glance

- **More flexibility with an innovative infinitely variable support**, extremely compact and safe with ESC (Ergonic® Setup Control)
- **4-arm placing boom** with optimised slip characteristics and extremely precise operation
- **Safe operation with new lighting concept** for improved illumination of the control points and setup locations
- **Intuitive, simple operation via Ergonic 2.0®** with numerous convenience functions for efficient operation
- **Maximum service life** thanks to torsion-resistant, integral frame and optimised mixing drum shape for the ideal axle load distribution
- New optimised hydraulic system **conserves resources and protects the environment**
- Maintenance-free components, numerous Putzmeister standard components and optimised access **minimise maintenance and service costs**
- **Wear-resistant delivery lines** rated for the load
- **Rugged mechanical construction of all core components** designed for continuous operation
- **Mixer drum from high-strength special steel**, extremely wear-resistant over maximum service life
- **Pumps to suit every requirement (S, Q, CS)**: Rotor pump or piston pump, longitudinal or transverse mounting
- **Expert service**, ensuring maximum machine availability



Further brochures: Ergonic® CT 4691  
Delivery line systems PM 2300



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 **Putzmeister**