



# 28Z Truck-Mounted Boom Pump

Technical specifications



# Compact machine with endless possibilities

## The widest range of versatility imaginable

The new 28Z-meter stands out with its wide variety of applications and makes work in inner-city areas, in low buildings, and tunnels significantly easier.

### Brand new compact design

The 28Z is more compact and maneuverable than ever before with the new TRC design, bringing all the necessary prerequisites for inner-city jobs without sacrificing maximum stability and robust components – the best foundation for a long life. And with infinite options from zero to full support (supported at vehicle width at front and rear), it adapts to any construction site.

### Small core pumps, mighty pressure

Don't let the size fool you; our 28Z offers the same impressive output levels as our other boom pumps – with outputs of up to 160 m<sup>3</sup>/h and a pressure of 85 bar.

### Improved safety features

A continuous flatbed, handrails, and a safety cut-out on the hopper are just a few of the improved safety features on the 28Z.

## Benefits at a glance

### Boom

- Flexible 4-section Z-fold boom design
- Integrated safety platform
- More flexibility in the boom eliminates dead space
- Low unfolding height
- Fast control response characteristics
- Lubrication for first boom cylinder and slewing bearing
- Standard 90° and 45° elbows, with lengthened collars for a longer service life
- Overextendable A hinge of up to 100°

### Pedestal

- New compact TRC design
- Increased storage space on the deck
- Infinitely variable support system

### Pump

- Engineered for all common concrete types
- Service-friendly control system with exclusive free flow hydraulics
- Wear-resistant design of S-Valve
- Optimized hopper with optimized shape
- Hopper agitator safety shutdown via Radio Frequency Identification (RFID)
- Automatic agitator direction of rotation corresponds to pumping direction
- Optimized pumping with EPS and EOC
- Optimized switchover procedure with SN control system and Push-Over avoids wear-intensive pressure peaks



**Putzmeister**

**PRO-VANTAGE®**  
WARRANTY PLAN

The PRO-VANTAGE® Warranty Plan extends the coverage on all Putzmeister BSF boom pumps for a total of 36 months or 6,600 hours at no extra charge. Domestic only.

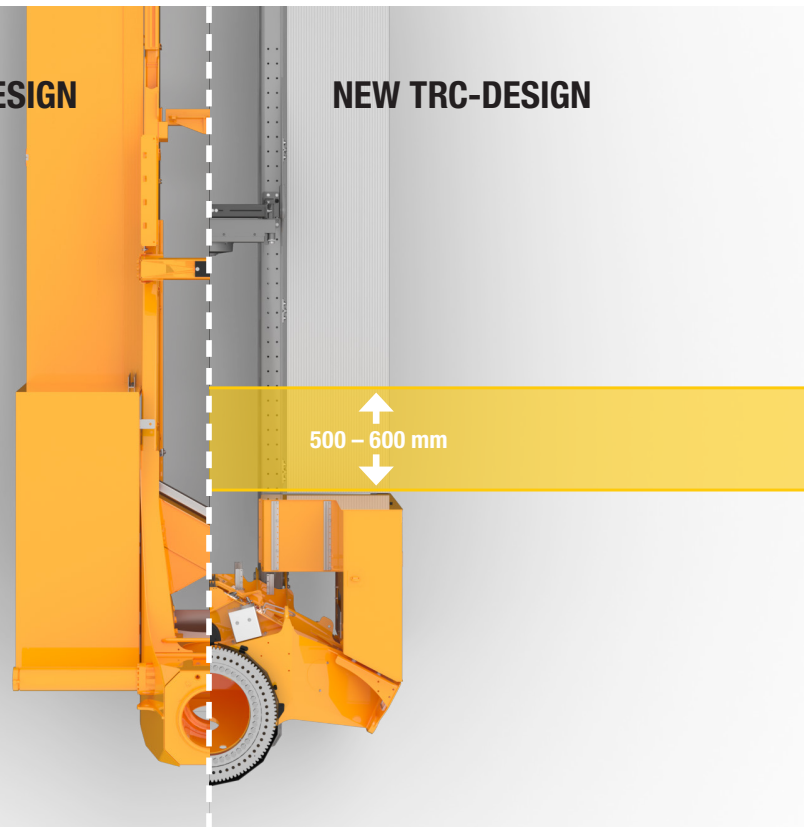
# The all-new TRC boom pedestal

## The TRC boom Pedestal

Our new TRC design (Trapezium Compact) is a further development of our TRD system – now even more compact with double telescopic support legs with a 10% smaller support area. The TRC not only saves a lot of space – 500 to 600 mm compared to the TRD – but also offers the option of infinitely variable support. The stability of the entire unit is also improved, supported by a reduced weight that allows for a higher payload.

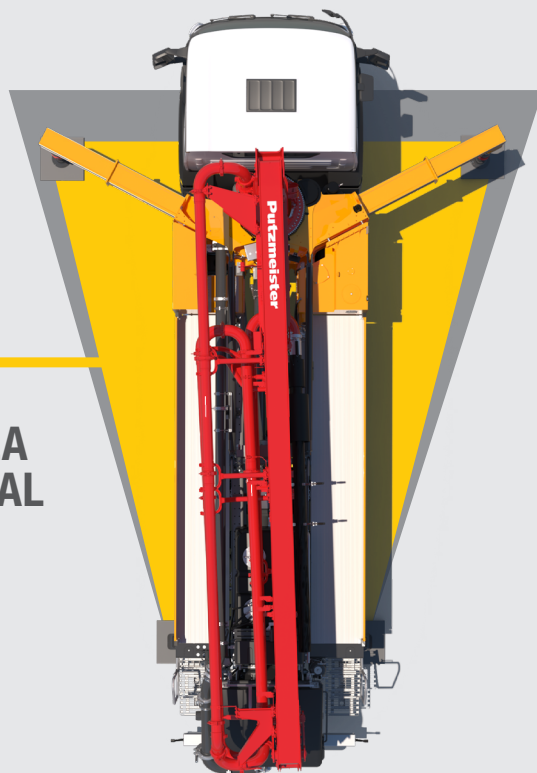
### TRD DESIGN

### NEW TRC-DESIGN



# 10%

**SMALLER  
SUPPORT AREA  
WITH IDENTICAL  
REACH**



## Ideal for any application

The 28Z has a wide variety of possible applications and is the perfect solution for pumping in inner-city areas, low buildings, tunnels, bridges, hose applications, and much more.

- **Lowest possible support area for inner-city pumping**
- **Perfect combination of narrow support and horizontal reach**
- **Flexible double telescopic support legs provide stability in any position**
- **T0 rear support legs for shorter paths in the working area**
- **Generous space for storage containers (concreting with hoses)**
- **10% smaller support area with identical reach\***

\* Compared to the old 28Z generation and depending on the configuration



# Complete flexibility on the jobsite

## Our most supportive system ever – iSA

Putzmeister is revolutionizing concrete pump set-up assistance with the new iSA (Intelligent Setup Assistant). The successor to the proven OSS system offers a significant improvement with machine reach and flexibility, and is kept simple by allowing the operator to turn iSA on and off with a single switch.

## MAXIMUM VERSITILITY, REACH, AND ASSISTANCE

### Intelligent Setup Assistant

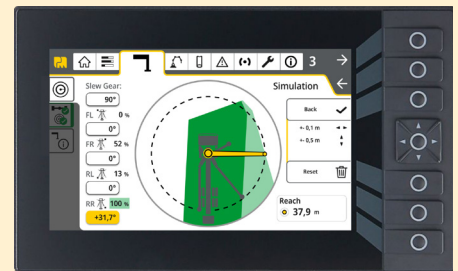
#### More flexibility than ever before

- **Maximum versatility** Optimum support options for the most difficult site conditions.
- **Maximum reach** The reliable reach prediction allows machine operators to utilize the robust structure of Putzmeister machines to their fullest potential.
- **Maximum assistance** Automatic stopping of the boom when the operator reaches the reach limit will keep the machine in stable conditions.

## The new FLEX base structure

The combination of iSA and the optimized steel geometry enables a new level of flexibility. With the Putzmeister FLEX base structures, supporting and setting up the machines is easier and more flexible than ever before – and incredibly straightforward for machine operators.

Clearly structured figures in real time, intuitive operation, and a radio remote control make setting up on site quick and easy.



## Infinitely variable support – complete flexibility on any construction site

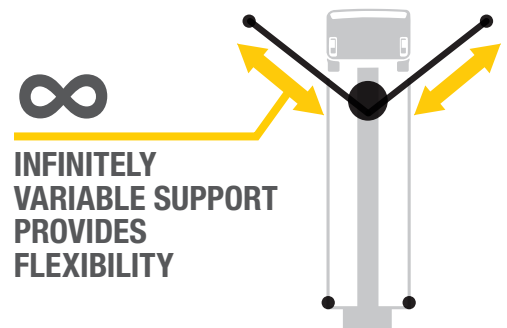
With the infinitely variable support, any leg position between zero support and full support can be approached. The machine operator adjusts the legs depending on the space available on the construction site – the machine calculates and does the rest. The improved flexibility gives up to 30% bigger working ranges on both sides compared to the old OSS.

### Quickly ready for use

The user-friendly Z-fold system is quick and ready for use in fewer steps. The minimum space requirement for support also saves additional time and effort: The 28Z front supports only require a maximum extent of 5.2 m and 2.6 m at the rear. The infinitely variable support legs can approach any position from zero to full support, and the machine will automatically calculate the reach.

### Compact and maneuverable

The compact TRC design not only improves the storage options, but also results in better machine accessibility, overall length, wheelbase, and maneuverability of the unit.





# Storage & safety

## Safety and ergonomics at the highest level

With the new continuous flatbed, the machine offers an easily accessible and safe working area without obstacles.

The bigger steps reduce the risk of tripping and – together with the new all-around lighting – create ergonomic working conditions during long, hard days. As a result, the machine can be set up safely even in bad lighting, and obstacles are detected with the flexible spotlights. Everything is geared towards making the daily work of machine operators and service employees as easy and safe as possible.



## 10% more storage space for everything you need

The 28Z is equipped with plenty of storage space for all your concrete pumping necessities. The 4.3 m long flatbed and modular storage concept makes storing your hoses, pipes, couplings, and other necessities easy and accessible.

### Accessible flatbed design:

The 28Z has easy access to the water tank, water box, the side decks, and the core pump thanks to the obstacle-free 4.3 m long flatbed. Neither the support cylinder nor the delivery line are blocking the working area. The new delivery line runs parallel to the core pump, which saves space and makes installation and maintenance easier.

### Modular storage concept:

The machine can be adapted to your personal requirements at three different levels (A to C). All this serves a simple goal: Making your hard daily work easier!



# Other features & options

## Standard features

### Concrete Pump Unit

- Free flow hydraulics
- Multi-piece piston cups
- S-Valve - 2318 hard-faced (9" to 7")
- RS 909 clean out hopper w/ solid polyurethane fold down back splash
- Hardox remixer paddles
- Hopper vibrator
- Hopper agitator safety shutdown via Radio Frequency Identification (RFID)
- Hard-chromed material cylinders
- Proximity switches w/ indicator
- Hydraulic outriggers - front & rear
- Snap-locks for outriggers & bubble level indicators
- 406 psi (28 bar) high pressure water pump
- 185 gal (700L) composite water tank
- Manual grease system - boom
- Auto-lube grease system - hopper
- Centralized lube locations
- Gauge Port Central (GPC)
- Loading decks for pipe & accessories
- Modular bolt-on flatpack
- Large side-mounted aluminum toolboxes
- Swing out steps (left side)
- Operator Supervision Warning System (OSWS)
- 5" delivery line on boom & deck pipe
- Proline 2000 Putzmeister Pipe Technology
- 10 ft (3m) delivery hose w/ coupling (one end)
- Electric oil cooler
- Wash out kit & hose
- Light kit package at boom, pedestal, & hopper
- 4 outrigger pads w/ 2 side compartments
- Wireless & cable remote

### Unit Control System

- Ergonic 3.0 w/ Ergonic Output Control (EOC)
- Standard world pattern
- Radio remote w/ Ergonic Graphic Display Remote Control (EGD-RC) w/ full proportionality & 20m cable back-up option
- Ergonic Graphic Display in control cabinet
- Cable remote w/ full proportionality
- Remote on/off of concrete pump & remote engine off

### Miscellaneous

- Ship-away kit w/ basic maintenance tools
- Operational & safety manuals
- High quality paint finish

## RS 909 Hopper

Putzmeister's robust, yet lightweight EZ Clean Out RS 909 hopper is engineered for performance and durability, and is ideal for high pressure applications and harsh mixes. Offering 19.4 ft³ (550 L) capacity, the hopper uses one remixer paddle motor and grate-mounted vibrator. An innovative RFID safety switch in the hopper disables the machine when the grate is opened.

### RS 909 Hopper features

- Hinged splash guard
- Automatic lubrication
- Hopper work light
- Hard-faced S-Valve
- Gradual 9" to 7" (230mm to 180 mm) reduction
- Thick-walled valve construction
- Fast and easy clean out
- 406 psi (28 bar) hydraulic water pump
- Wash out kit and hose
- 40 gallon (145 L) pedestal water tank, 153 gallon (580 L) outrigger water tank



## The Swing Elbow: Two machines in one

The 28Z features a 90° Swing Elbow used to connect a hose directly to the hopper, allowing the unit to function as not only a boom pump but also as a line pump with rod side pressure up to 85 bar. The elbow can be used for everyday operation, and is easily cleaned using standard cleaning procedures.



## Other Available Options

Auto Lube System - Boom

Squeeze valve air line installation

High pressure washer (2000 psi / 138 bar)

Squeeze valve installation w/ PM EQV part

Oil tank heater

Wash-out hose reel kit

Outrigger lightbar

Water tank heater

Partial Flow Filter / Dehydrator



# iLS pump – highlights

## The Putzmeister iLS pump generation is setting standards across the board

The heart of every truck-mounted concrete pump is the pump itself. The iLS pump generation delivers significantly improved data across the board and is the logical advancement of the tried and proven HLS generation.

### Special features

- Fuel savings of up to 25%
- 3% increased efficiency with leak prevention
- 10% better suction resulting from the elimination of constrictions in the concrete flow
- Optimized drive unit
- Optimized conveying unit – ideal for the heaviest concretes
- Reduced wear for long service life
- Optimized accessibility for maintenance and service
- Automatic stroke correction without pump interruption
- Field-tested and robust
- Reduced noise

#### Hopper

The hopper has a user-friendly and low-maintenance ergonomic design. It is RFID protected, the grill is welded, and the hopper cover can be locked in 4 positions.

#### Lubrication system

The grease cycles have been adapted to better protect all concrete bearings from wear.

#### Concrete cylinder

Eliminating the constriction before the S transfer tube has resulted in calmer pump behavior and improved efficiency. On longer sections, the reduction from 250 mm to 180 mm occurs only in the S transfer tube.

#### Drive cylinder

Hydraulic circuits further relieved through automatic stroke compensation and the elimination of pressure peaks in the end bearings.

#### Seals

Designed for maximum reliability for outstanding system performance.

#### S transfer tube swivel bearing

The hopper wall thickness and bearing surface have been doubled for maximum reliability.

#### S transfer tube

The hardened valve operates smoothly and guarantees extreme durability.

**LONGER SERVICE LIFE**  
**LOW MAINTENANCE**  
**OPTIMIZED EFFICIENCY**  
**OPTIMIZED ACCESSIBILITY**  
**EASY CLEANING**  
**BEST PERFORMANCE!**

# Ergonic® 3 – highlights

## The new Ergonic® 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, and 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.

**AS EASY TO OPERATE  
AND MORE INTUITIVE  
THAN EVER BEFORE**

**ERGONIC® 3**



### Pumping made smart

If our concrete pumps are the heart of Putzmeister machines, then the Ergonic system is the brain.

As a switching center, the microprocessor-supported control systems regulate the functions of concrete pumps and placing booms.

### Always by your side – Ergonic® 3 inside

#### **EPS** Ergonic Pump System

Takes control of the concrete pump for optimized pumping.

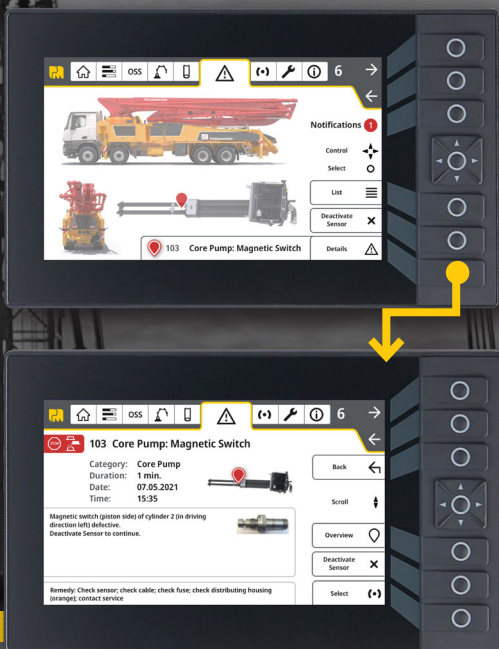
#### **EOC** Ergonic Output Control

Regulates the optimum motor speed for smooth operation with fuel efficiency and low wear.



## Ready for the future

- **A future-oriented solution** with interfaces for future expansions and easy software updates.
- **Service-friendly concept** with services that can be accessed and implemented efficiently.
- **Clearly guided fault management** on the radio remote control and display.



## The best of two worlds

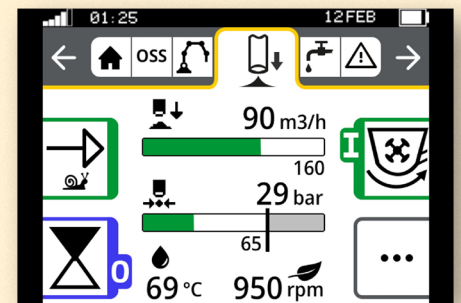
Ergonic<sup>®</sup> 3 is the logical evolution of Ergonic<sup>®</sup> 1 and Ergonic<sup>®</sup> 2.

Proven features are maintained, others developed further, and new and future-oriented functions are integrated.

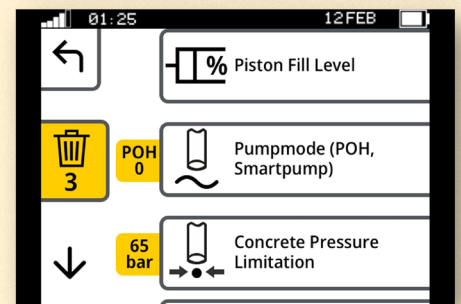
- Experienced Putzmeister customers quickly become familiar with operation, making the switch incredibly easy.
- New customers will need little training or instructions since operation is so intuitive.
- Once learned, a wide variety of machine models can be operated.

## Keeping an overview in every situation

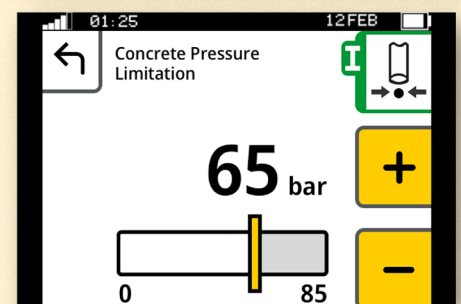
- The static menu bar guides users through the available functions.
- Neatly and intuitively arranged functions.
- Simple menu structure with a maximum of two submenu levels.
- Main menu with all standard functions and additional details in submenus.



Main menu



Submenu level 1



Submenu level 2

## SIMPLE OPERATION

Easy and intuitive, for all machine operators.

## RELIABLE OPERATION

With a comprehensive fault management.

## DETAILED FAULT MANAGEMENT

Comprehensive fault messages with suggested solutions.

# You can rely on Putzmeister – service, parts, and training

## Everything that sets service apart

Putzmeister provides first class service with swift assistance, meaningful advice, and a reliable supply of genuine Putzmeister parts and accessories in over 120 countries.

### Ideally placed to support you

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

Our employees have all the relevant technical information about your machine at their fingertips, allowing us to provide you with the best possible support for emergencies, repairs, or preventive maintenance.



## Our services for cost-effective work

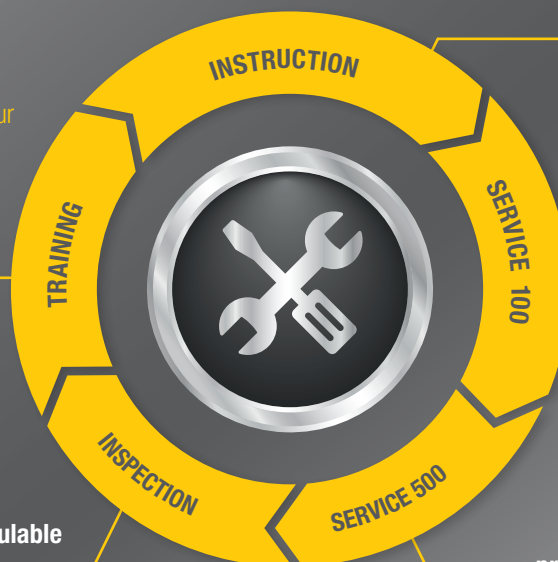
The Putzmeister service support points offer you these services - all provided by our experienced service staff:

### Customer training – benefit from expert knowledge

Practice-oriented learning offers many benefits: Master the machine and all of its special features, use the machine to optimum effect, reduce operating costs, and avoid operating errors.

### 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.



### Introduction at handover – everything correct from the get-go

You and your team can adapt perfectly to all features and innovations.

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

Receive a status report on your concrete pump per the Putzmeister service plan.

### 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.



## Putzmeister Academy - Service Schools

We want to make sure you get the most from your Putzmeister equipment. To maximize the use and profitability of your investment, take advantage of the regular training seminars at our Wisconsin headquarters.



Service Schools cover maintenance, operation, and inspection of boom pumps, Telebelts, and Thom-Katts. They include hands-on training, problem-solving exercises, hands-on presentations, and safety training.

## Genuine parts for maximum availability

We use only genuine Putzmeister parts in our workshops to guarantee consistent quality. You can be sure that your machine meets the tough requirements with maximum performance and availability.

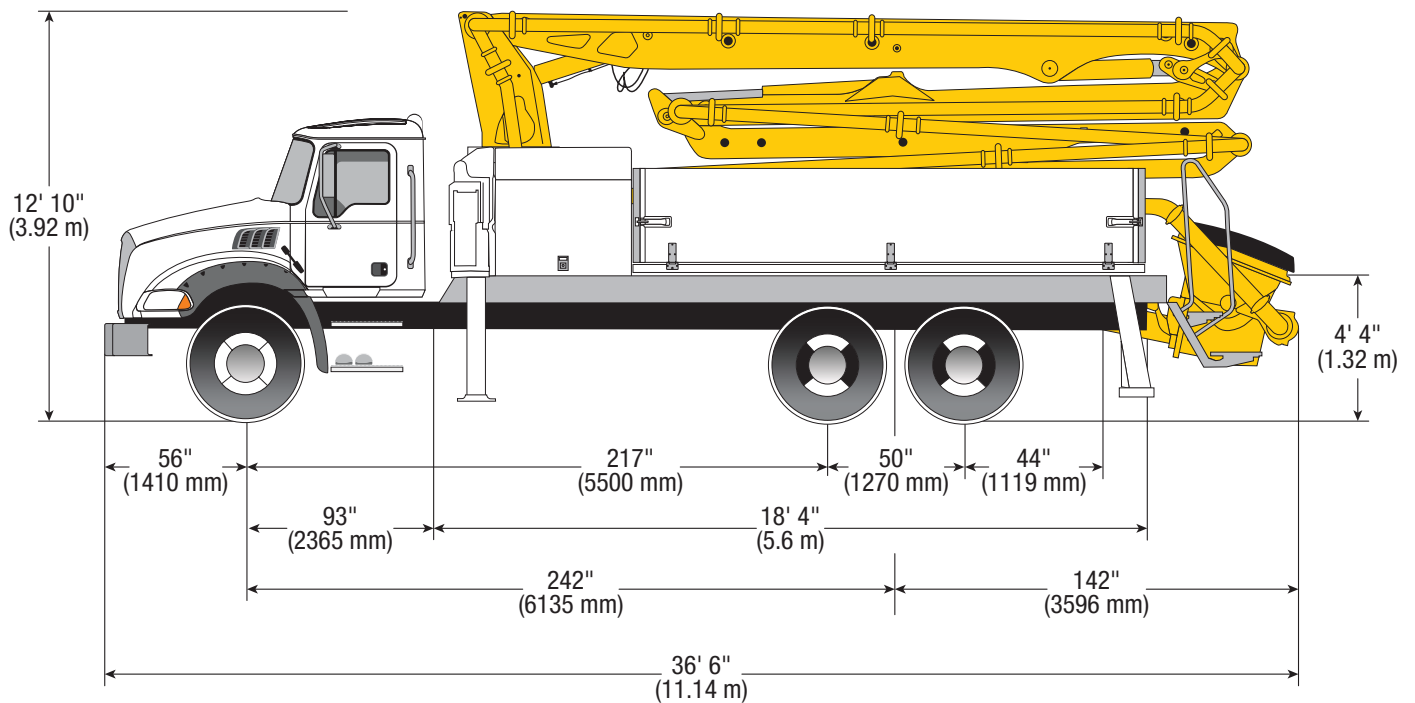
- Immediate availability worldwide through our extensive dealer network
- Longest possible service life and maximum reliability
- Minimal maintenance and repair work thanks to high-quality materials and tested quality
- Quick and easy replacement with precise fitting and no variations in quality
- Safety for your customers, your personnel, and your investment

## Product and training information — whenever, wherever

We consistently provide the most up-to-date product and training information through our YouTube channel. From the comfort of your own home to on the jobsite, you have access to hundreds of videos that showcase the latest and greatest Putzmeister products, how-to videos, demonstrations, and much more.



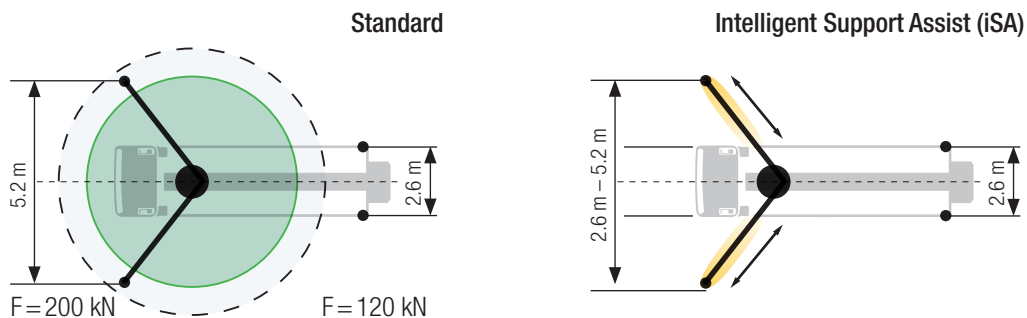
# 28Z-Meter Truck-Mounted Specifications



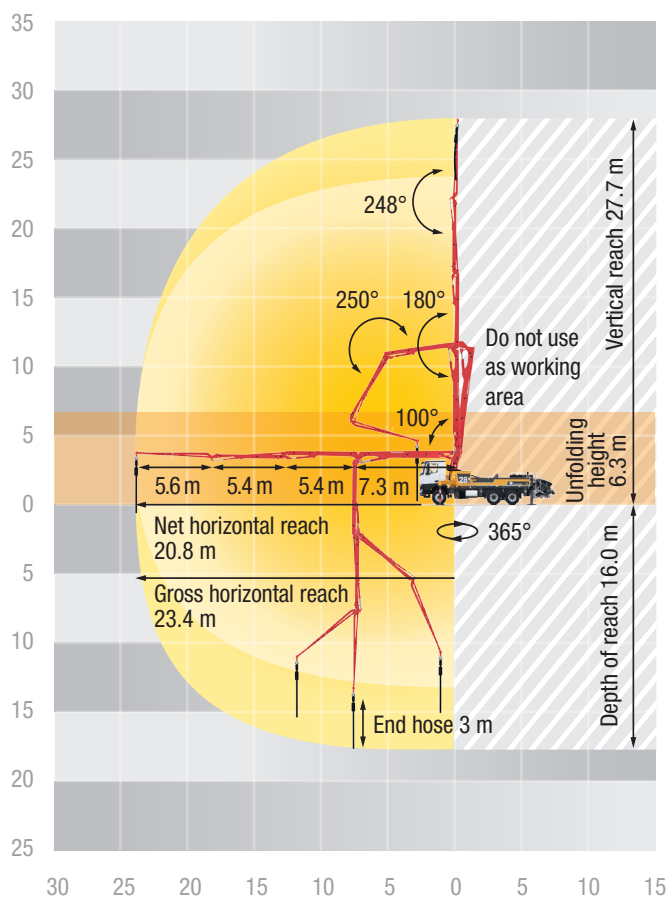
Machine Dimensions	Imperial	Metric
Length	36' 6"	11.14 m
Width	8' 2"	2.50 m
Height	12' 10"	3.92 m
Outrigger spread L - R — front hydraulically extended out & down	17' 1"	5.20 m
Outrigger spread L - R — rear lift cylinders extend down	8' 6"	2.60 m
Wheelbase	242"	6,135 mm

Weight	Imperial	Metric
Front axle weight	14,978 lbs	6,794 kg
Rear axle weight	30,908 lbs	14,020 kg
Approximate total weight	45,886 lbs	20,814 kg

Based on Model MACK Granite with .16H pump cell. Dimensions will vary with different truck makes, models, and specifications. Weights are approximate and include pump, boom, truck, driver and full fuel tank. Varies with options selected.







Boom   Multi-Z Design	Imperial	Metric
<b>Height &amp; Reach</b>		
Vertical reach	90' 11"	27.7 m
Horizontal reach	76' 9"	23.4 m
Reach from front of truck*	68' 3"	20.8 m
Reach depth	52' 6"	16.0 m
Unfolding height	20' 8"	6.3 m

#### 4-Section Boom

1st section articulation	100°	
2nd section articulation	180°	
3rd section articulation	250°	
4th section articulation	248°	
1st section length	23' 11"	7.3 m
2nd section length	17' 9"	5.4 m
3rd section length	17' 9"	5.4 m
4th section length	18' 4"	5.6 m

General Specifications	Imperial	Metric
Pipeline Size (ID) metric ends	5"	125 mm
Rotation	365°	
End hose — length	10' 0"	3.00 m
End hose — diameter	5"	125 mm

Pump	28Z.12 H		28Z.16 H		28Z.17 iLS	
	Imperial	Metric	Imperial	Metric	Imperial	Metric
Output — rod side	144 yd <sup>3</sup> /hr	110 m <sup>3</sup> /hr	209 yd <sup>3</sup> /hr	160 m <sup>3</sup> /hr	—	—
— piston side	97 yd <sup>3</sup> /hr	74 m <sup>3</sup> /hr	141 yd <sup>3</sup> /hr	108 m <sup>3</sup> /hr	222 yd <sup>3</sup> /hr	170 m <sup>3</sup> /hr
Pressure — rod side	1,233 psi	85 bar	1,233 psi	85 bar	—	—
— piston side	1,885 psi •	130 bar •	1,885 psi •	130 bar •	1,233 psi	85 bar
Material cylinder diameter	9"	230 mm	9"	230 mm	10"	250 mm
Stroke length	83"	2,100 mm	83"	2,100 mm	83"	2,100 mm
Maximum strokes per minute						
— rod side		21		31		—
— piston side		14		21		28
Volume control		0-Full		0-Full		0-Full
Vibrator		Standard		Standard		Standard
Hard-chromed material cylinders		Standard		Standard		Standard
Hydraulic system		Free Flow		Free Flow		Free Flow
Hydraulic system pressure	5,075 psi	350 bar	5,075 psi	350 bar	5,075 psi	350 bar
Differential cylinder diameter	5.1"	140 mm	5.1"	140 mm	4.5"	115 mm
Rod diameter	3.1"	80 mm	3.1"	80 mm	3.1"	80 mm
Maximum size aggregate	2.5"	63 mm	2.5"	63 mm	2.5"	63 mm
Water tank — pedestal	185 gal	700 L	185 gal	700 L	185 gal	700 L

Maximum theoretical values listed. \* Applies to units mounted on PMA stock truck — MACK MRU 613 • Standard delivery line system rated at max line pressure of 1,233 psi (85 bar).

# Here for you every step of the way

## Our Putzmeister Promise

We build machines that increase your production and give you a competitive edge – and these machines are continuously developed. Innovative technologies and durable quality need to adapt to your ever-changing daily challenges. Our products stand for optimum output with low fuel consumption, wear, and costs.

Our customers will always have a thinking, intelligent partner in all their undertakings; a partner that will deliver to their exact requirements regardless of the complexity of the task or the remoteness of the scale. With knowledge and understanding backed by experience, we approach every task with renewed enthusiasm – be it a small scale construction or a mass assignment, tight deadlines, or unique concreting and manufacturing needs.

## Your Putzmeister Team



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## Putzmeister

Putzmeister America, Inc.  
1733 90th Street  
Sturtevant, WI 53177 USA  
[Putzmeister.com](http://Putzmeister.com)

Phone (262) 886-3200  
Toll-free (800) 884-7210  
Fax (262) 884-6338  
[pmr@putzmeister.com](mailto:pmr@putzmeister.com)