



**Putzmeister**



# 39Z-Meter

Truck-Mounted Concrete Boom Pump

# Three-in-one capability

## A versatile machine for many options

Putzmeister's 39Z-Meter Truck-Mounted Concrete Boom Pump features a brand new design that can be configured to meet the toughest challenges. It's a jack-of-all-trades that can achieve typical and high-rise pumping applications as well as frost law and special weight considerations. We've listened to our user feedback and put it into action. Rather than purchasing three separate pieces of equipment, customers will benefit from the value of a single, customizable machine.

### **Built to Last**

Reinforced with 2,500 lbs (1134kg) of steel, and featuring rod-side outputs of 180 yards<sup>3</sup>/hr (138 m<sup>3</sup>/hr), the optional .13 HPD pump cell is designed to withstand extreme conditions as it performs in high-pressure and long-distance pumping applications.

### **Minimal maintenance costs**

The 39Z is engineered to save time and money. Its robust components stand up to wear. Necessary maintenance is simple, quick and kept to a minimum.

### **Easy to operate**

The boom control's fast response characteristics, smooth pump operation, sophisticated routing of the delivery lines, and robust steel structure ensure precise concrete placement.

## **Genuine Parts. Expert Service. Putzmeister keeps you running.**

Not all parts and accessories are created equal. Putzmeister offers the longer-lasting, better-performing parts and accessories you need to stand up to increased wear conditions. This means greater savings and less downtime.

With a busy schedule and your reputation on the line, nothing is more critical than ongoing on-site support. Coast-to-coast and around the world, you can count on expert Putzmeister service to keep your project and jobsite moving. Our trained technicians are available 24/7 to deliver the help you need, when you need it.



# Boom, control and support

## The boom that meets your needs

The unit comes equipped with a newly designed four-section Multi-Z boom that can either be permanent or detachable. Safety has been thoroughly addressed with the addition of an integrated work platform to safely access the detachable boom — connecting and disconnecting the placing boom becomes a simple, straightforward process. In addition, Ergonic® 2.0 Control System is now standard to make operation easier.



## Maximum usability, minimum maintenance costs

### Engineered to save time and money

- Robust components with high wear resistance
- Many maintenance-free and standard components
- Quick and easy maintenance access
- Bolt-on parts such as the pipe bracket

### Fewer movements increase service life

Thanks to auto lubrication points, the operator can remain safely on the ground — the 38Z-5 lubricates the first boom cylinder and the slewing bearing and hub independently. This is not just faster and more cost-effective; it also increases the components' service life.

## Ergonic® 2.0: the brains behind the brawn

Putzmeister machines with Ergonic overcome the difficulties of day-to-day work on the job site to deliver increased efficiency, reduced costs and greater flexibility.

- **EPS – Ergonic® Pump System**
- **EOC – Ergonic® Output Control**
- **Ergonic® FFS**
- **EGD-RC — Ergonic® Graphic Display (Radio) Remote Control**
- **EBC — Ergonic® Boom Control**

## Stands steady in every location

With TRDI support, developed by Putzmeister, you can save time and space without compromising on safety. Telescoping outriggers can be placed between obstacles and in the smallest of spaces — a huge advantage when working under restrictive setup conditions.

### Narrower support with One-Sided Support (OSS)

With OSS, the outrigger footprint is reduced even further. This ensures that the boom's total reach on the fully supported side is optimally used.



**ergonic**<sup>®</sup>  
inside

# 39Z-Meter — features at a glance

## Benefits at a glance

- Smooth 4-section Multi-Z boom design with detach option
- Lightweight and easily meets DOT weight guidelines
- 3-in-1 pumping capabilities: standard, BSA, detachable
- Features new optional .13 HPD pump cell for extreme pumping
- Efficient operation thanks to intuitive, innovative ergonomics
- Robust, calm and stable due to reinforced base structure, compact pedestal, and boom line installation
- Maintenance- and service-friendly with optimized accessibility and consistent bolt concept
- Lower service costs thanks to standardized, maintenance-free components and smaller quantities of operational fluids

## The new boom at a glance

- 125' 8" (38.30m) vertical reach with 4-sections
- New Multi-Z boom design
- Integrated safety platform with detach boom option
- No dead space, more flexibility
- Low unfolding height
- Fast response characteristics of boom control
- Improved safety, reduced boom vibration
- EBC for vibration damping, one-handed control
- Lubrication for first boom cylinder and the slewing bearing
- Standard 90° and 45° elbows, with lengthened collars for a longer service life

## The new pedestal at a glance

- Four standard frame lengths available to meet local weight requirements
- Low weight offers high payload capacity
- Plenty of storage space on the deck
- A more robust, calm and stable base structure
- Significantly reduced footprint with the use of one-sided support (OSS) outrigger system
- Saves money thanks to maintenance-free components, comprehensive bolt concept and standard components

## The new pump at a glance

- Pump geometry is optimally coordinated to all common concrete types
- Service-friendly control system with exclusive free flow hydraulics
- Wear-resistant design of S-Valve for long service life
- Optimized hopper with optimized shape
- Hopper agitator safety shutdown via Radio Frequency Identification (RFID)
- Automatic agitator direction of rotation corresponds to pumping direction
- Smooth, optimized pumping with EPS and EOC, protects the pump and vehicle
- Optimized switchover procedure with SN control system and Push-Over avoids wear-intensive pressure peaks
- More convenient operation with Ergonic® 2.0, the latest concept for control hardware and software from Putzmeister
- Minimal operating costs thanks to maintenance-free common components and increased accessibility
- Easy replacement of components due to bolt-on concept



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.

# High-performing pump and pedestal

## Free flow hydraulics in a closed loop system

### Free flow hydraulics in a closed loop system

The pumps at the heart of Putzmeister's free flow pumping system are bi-directional, variable displacement piston pumps. Depending on stroke, oil flows in a closed loop from either port A or port B on the pump to the hydraulic cylinders.

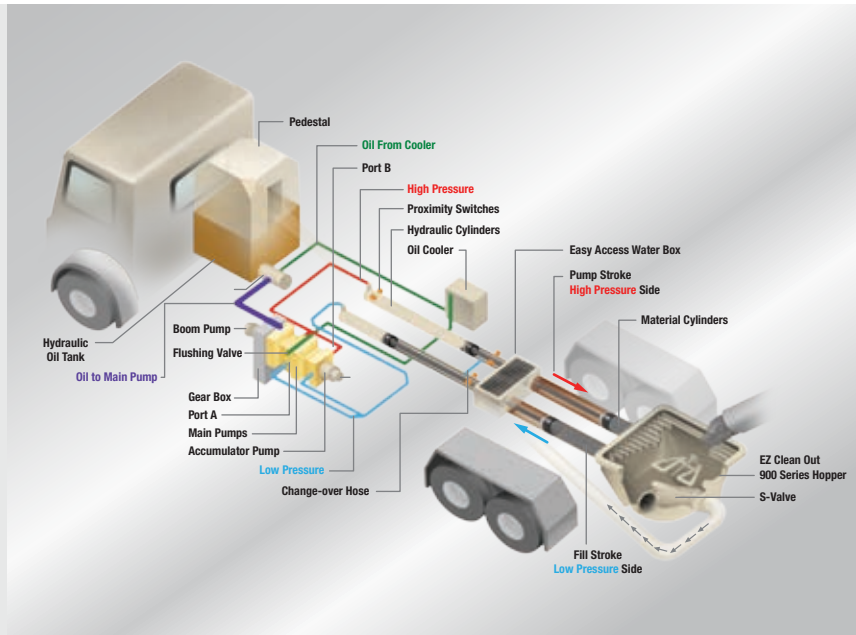
Depending on the specific pump cell size, up to 20% of the oil leaves the simple closed loop system during each stroke through a flushing valve on the main pump and cycles to a cooler before it returns to the hydraulic oil tank.

Unlike an open loop system, the oil flows freely without passing through any unnecessary valves that can generate heat. Thus, the closed loop requires far less oil to run the system, as a larger reservoir is not necessary to cool all of the oil. In addition, return oil can be cycled directly through the main kidney filter instead of going back to the tank, keeping it in the filtered state preferred by the hydraulic components for long life and dependable operation.

Speed and timing are also critical to superior performance. Quicker and more responsive than a hydraulic signal, the electrical system on a Putzmeister pump minimizes the time it takes to change direction at stroke end. An electrical signal precisely synchronizes the drive cylinders with the accumulator system that controls the S-Valve in the hopper. Reserved energy stored in a nitrogen bladder is sent as a supercharged blast of oil at precisely the right moment to facilitate a smooth and fast shift of the S-Valve from one position to another.

### Key advantages of Putzmeister's free flow hydraulics

- Changes in material pressure in the delivery line are reduced to ensure smooth pumping and a consistent concrete flow.
- The intelligent design minimizes wear-inducing pressure peaks, increases service life and makes our pumps extremely powerful.
- Rapid change-over of the stroke means higher outputs, a smoother flow of concrete and less boom bounce.
- There is greater pump output due to the efficient use of all available energy.



## The pedestal — robust, stable, reliable

The 39Z fulfills the most stringent weight regulations while offering plenty of additional payload for functional fluids and accessories. Sufficient storage is available due to the outrigger design and wide deck with anti-slip surface.

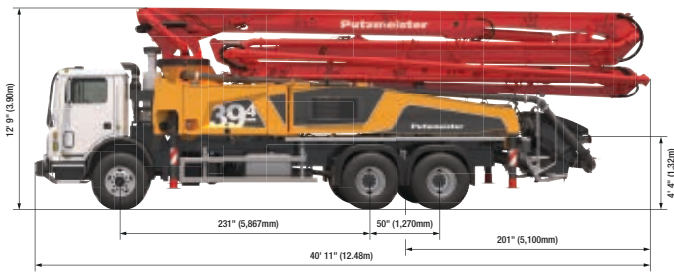
Additional details make the base structure particularly robust: the overlap length of the front telescopic support legs, the closed rear swinging outriggers, and the compact boom pedestal, which is made of a single piece of material.

The pedestal is particularly impressive when it comes to force distribution. The forces acting on it are completely distributed over the outriggers, protecting the chassis. The I-frame and connection concept also ensures a longer service life than that of rigid frames.

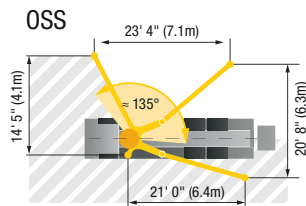
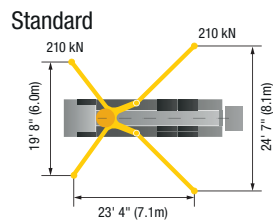
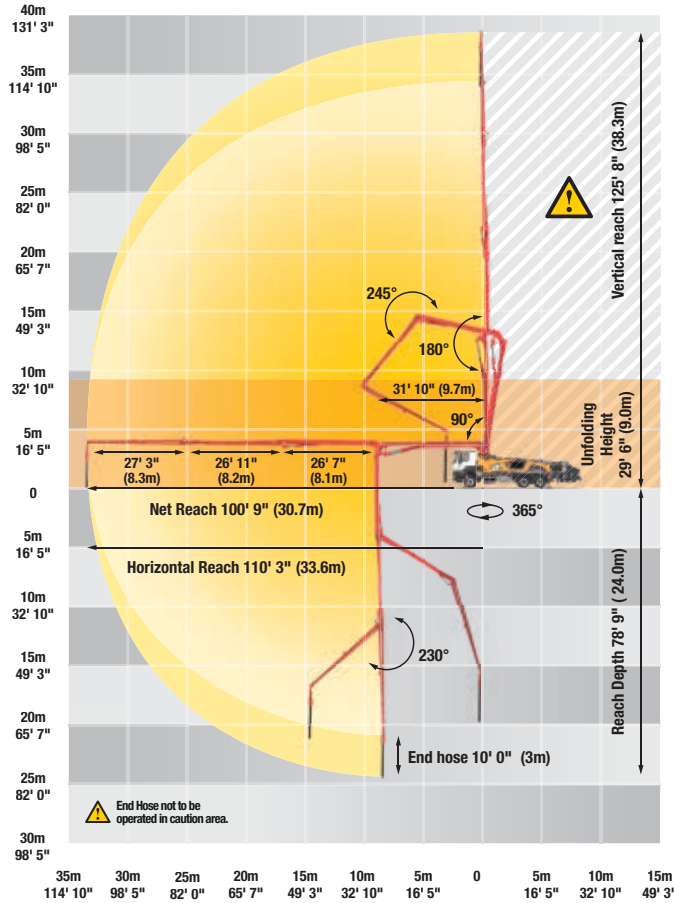
## The concrete pump — enough power to fit your needs

Like all Putzmeister truck-mounted concrete pumps, the 39Z-Meter is available with different pump kits, each with a delivery pressure of 1,233 psi (85 bar). The cost-effective 16H features two chromium-plated delivery cylinders and smooth operation. The 13 HPD is heavyweight and designed to withstand extreme conditions as it performs in high-pressure and long-distance pumping applications.

# 39Z-Meter Truck-Mounted Specifications



## 39Z-Meter Range Diagram



Length	40' 11"	(12.48m)
Width	8' 2"	(2.50m)
Height	12' 9"	(3.90m)
Wheelbase	231"	(5,867mm)
Front axle weight	18,831 lbs	(8,542kg)
Rear axle weight	37,564 lbs	(17,039kg)
Approx total weight	56,395 lbs	(25,581kg)

Based on Model MACK MRU 613 with .16H pump cell.  
Weights are approximate and include pump, boom, truck, driver and full fuel tank.  
Varies with options selected.  
Dimensions will vary with different truck makes, models and specifications.

### Boom Specifications | Multi-Z Design

<b>Height &amp; Reach</b>		
Vertical reach	125' 8"	(38.30m)
Horizontal reach	110' 3"	(33.60m)
Reach from front of truck*	100' 9"	(30.70m)
Reach depth	78' 9"	(24.00m)
Unfolding height	29' 6"	(9.00m)
<b>4-Section Boom</b>		
1st section articulation	90°	
2nd section articulation	180°	
3rd section articulation	245°	
4th section articulation	230°	
1st section length	31' 10"	(9.70m)
2nd section length	26' 7"	(8.10m)
3rd section length	26' 11"	(8.20m)
4th section length	27' 3"	(8.30m)

### General Specifications

Pipeline Size (ID) metric ends	5"	(125mm)
Rotation	365°	
End hose — length	10' 0"	(3.00m)
End hose — diameter	5"	(125mm)
Outrigger spread L-R — front	19' 8"	(6.00m)
hydraulically extended out & down		
Outrigger spread L-R — rear	24' 7"	(8.10m)
hydraulically swing out & extend down		

### Pump Specifications

	39Z.13 HPD	39Z.16H
Output — rod side	180 yd <sup>3</sup> /hr (138m <sup>3</sup> /hr)	210 yd <sup>3</sup> /hr (160m <sup>3</sup> /hr)
— piston side	123 yd <sup>3</sup> /hr (94m <sup>3</sup> /hr)	141 yd <sup>3</sup> /hr (108m <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)•
Material cylinder diameter	9" (230mm)	9" (230mm)
Stroke length	83" (2,100mm)	83" (2,100mm)
Maximum strokes per minute		
— rod side	26	31
— piston side	18	21
Volume control	0-Full	0-Full
Vibrator	Standard	Standard
Hard-chromed material cylinders	Standard	Standard
Hydraulic system	Free Flow	Free Flow
Hydraulic system pressure	5,075 psi (350 bar)	5,075 psi (350 bar)
Differential cylinder diameter	6.3" (160mm)	5.5" (140mm)
Rod diameter	3.5" (90mm)	3.1" (80mm)
Maximum size aggregate	2.5" (63mm)	2.5" (63mm)
Water tank — pedestal	185 gal (700L)	185 gal (700L)

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)



Putzmeister America, Inc.  
1733 90th Street  
Sturtevant, WI 53177 USA  
Phone (262) 886-3200  
Toll-free (800) 884-7210  
Fax (262) 884-6338