



42Z-METER | TRUCK-MOUNTED CONCRETE BOOM PUMP

42Z-METER



# A NEW STANDARD OF INNOVATION AND EXCELLENCE

## YOU TALK. WE LISTEN. 42Z-METER DELIVERS.

Designed with the operator in mind, the new Putzmeister 42Z delivers greater payload capacity, and longer pump life to increase job site performance.

Weighing in at 66,000 pounds and with thirty percent more deck space, there is plenty of capacity for job site equipment, water and fuel, as well as space to comfortably move around the deck.

The pedestal sub-frame bolt connections make the frame more flexible to adjust to torsion from pump force, minimizing cracking and providing longer pump life.

No matter how challenging the task or difficult the constraints of the job site, the Putzmeister 42Z's improved lightweight design is maneuverable and efficient under almost any condition.



## DO MORE FOR LESS



**HIGHLY EFFICIENT  
HYDRAULIC OIL SYSTEM**

The hydraulic system on the 42Z-Meter has an improved filtration system, uses less oil and has fewer parts. Cleaner oil improves pump functioning and reduces maintenance intervals.



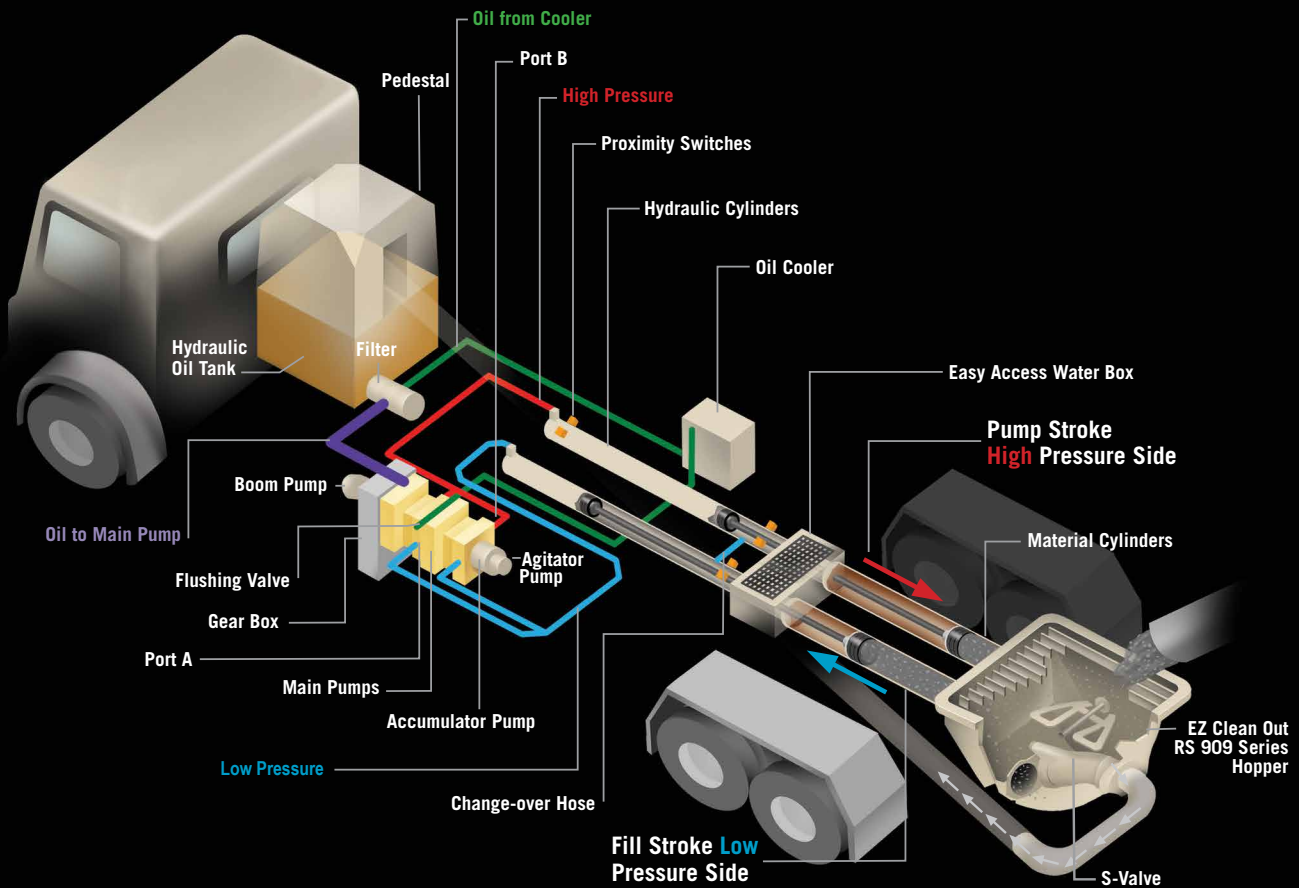
**IMPROVED PIPE LAYOUT**

Improved pipe layout, with single bend in turret and only two elbow sizes — 45-degree and 90-degree — increases parts commonality and reduces wear.



**FLEXIBLE PEDESTAL**

By improving the pedestal construction with a bolt connection and simplifying the turret design, you can count on less down time and lower maintenance costs.



## PUTZMEISTER | FREE FLOW HYDRAULICS

### 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.

## BOOM

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- 136' 6" (41.60m) vertical reach
- Low unfolding height of 28' 3" (8.60m)
- Versatile 5-section Z-Fold boom
- Manual lubrication, optional auto lubrication
- Integrated work lights

## BOOM OPERATION AND CONTROL

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- Smooth and precise boom positioning at greater distances
- Fully proportional HBC radio remote
- Fully proportional remote with 130' 0" (40m) cable
- Gauge Port Central (GPC)
- Modular Boom Controls (MBC)
- 24V electrical system

## DELIVERY LINE

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- Equipped with 5" (125mm) twin-pipe delivery line on all boom sections providing efficient concrete delivery
- P2W twin-pipe deck pipe with PPT turret elbow
- Bolt-on easy lift-out brackets for simple delivery line replacement
- Standardized 45° and 90° elbows and straight pipe sections
- Improved pipe layout reduces pipe wear
- Common component availability and easy replacement

## PEDESTAL

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- Rotation bearing and access openings simplify turret pipe changes
- Sub-frame's bolted connections absorb all forces
- Easy access large single-suction filter with indicator gauge
- Efficient hydraulic oil system
- Condensation trap in the hydraulic tank for water collection
- Increased deck space and payload capacity for pipe and hose storage
- Manual lubrication, optional auto lubrication
- Side-mounted aluminum toolboxes
- Integrated work lights
- Breakaway rear steps

## OUTRIGGERS

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- Two-part outriggers for easy maintenance
- Quick setup on restrictive job sites
- Fully hydraulic outriggers with integral cylinders
- "X" brace outrigger system
- Front outriggers extend diagonally out and down
- Rear outriggers swing out and extend down
- Four outrigger pads in two side compartments
- Bubble level indicators
- One-Sided Support (OSS) system featuring a 120° working range
- Optional auxiliary fuel tank

## CONCRETE PUMP

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- Ergonic® Pump System (EPS) with color Ergonic Graphic Display (EGD)
- Free flow hydraulic system for smooth, controllable pumping
- Multi-piece piston cup design
- Hard-chromed material cylinders
- Redundant proximity sensor system with function indicators
- Fully adjustable volume control for very slow pumping with full concrete pressure and boom speed
- Modular pump control box

## EZ CLEAN OUT RS 909 HOPPER

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- Large 19.4 ft³ (550L) capacity
- Grate-mounted vibrator
- Hopper grate RFID safety switch
- Hinged splash guard covers hopper during transit
- Lower hopper height allows easy discharge from ready mix truck
- Automatic lubrication
- Integrated work lights

## S-VALVE

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- Ideal for high pressure applications and harsh mixes
- Hard-faced S-Valve
- Gradual 9" to 7" (230 to 180mm) reduction
- Thick-walled valve construction
- Lasting wear over years of use

## CLEAN OUT

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- Fast and easy clean out
- 406 psi (28 bar) hydraulically-driven water pump
- Wash out kit and hose
- Integrated 185 gallon (700L) water tank



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.



**BETTER BOOM DESIGN**

Putzmeister’s “smart design” boom incorporates welding seams below the edge of maximum stress. The new 42Z rectangle boom design minimizes boom bounce, and is easier for the hoseman to maneuver. The boom features more straight pipe for a less stressful concrete flow and longer wear on parts. The Z-Fold configuration handles space-restrictive areas and can pump even when the boom is not fully extended. Optimized for the greatest maneuverability and flexibility available, resulting in a larger operational range.



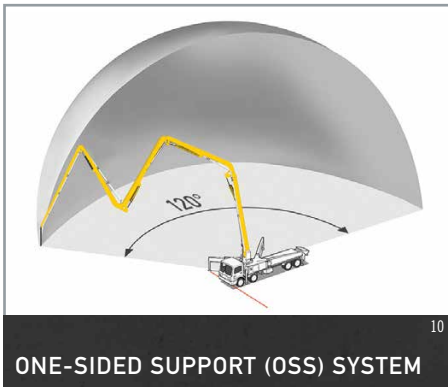
**CONVENIENCE AND CONTROL**

The Automatic Frequency Management (AFM) system on the standard HBC proportional radio remote ensures minimal interference with other frequency transmitters. A fully proportional cable remote is also standard. Unlike other remote control systems, the radio and cable remote systems are independent, offering redundancies to ensure proportional operation with either the radio or cable remote.



**RS 909 HOPPER**

Putzmeister’s robust, yet lightweight EZ Clean Out RS 909 hopper is engineered for performance and durability. Offering 19.4 ft<sup>3</sup> (550L) capacity, the hopper uses one remixer paddle motor and grate-mounted vibrator. An innovative RFID safety switch incorporated in the hopper disables the machine when the grate is opened.



**ONE-SIDED SUPPORT (OSS) SYSTEM**

For enhanced job site versatility, Putzmeister’s unique OSS system allows the operator to reduce the outrigger extension on one side of the unit to create a smaller overall machine footprint. Utilizing a series of sensors, OSS enables the unit to maintain a defined and safe 120 degree working envelope on space restrictive sites that demand a larger boom.



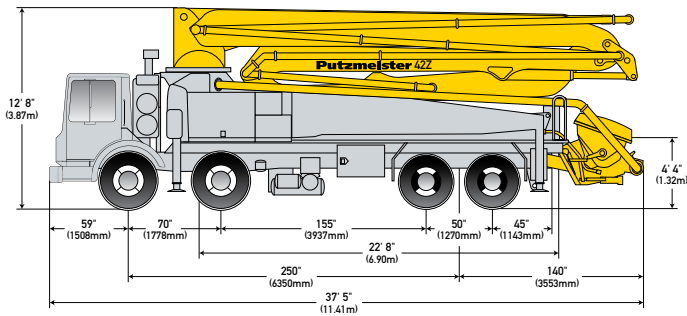
**ERGONIC® PUMP CONTROL SYSTEM (EPS)**

The computer-aided EPS constantly monitors and regulates the operation of the concrete pump and truck engine. The electronic regulation of this system means the pump always runs at peak performance. EPS results in more productivity and greater efficiency with less for the operator to worry about. The color Ergonic Graphic Display (EGD) provides EPS monitoring from one convenient location.



**BOLT CONNECTIONS**

From pedestal construction and flatpack connections to pipe hanger brackets and hopper grate, many of the critical wear areas have been improved with bolt connections. Simplifying the design and allowing for torsion forces to easily pass through, the bolt connections provide extended service life and easier maintenance.



## 42Z-METER TRUCK-MOUNTED SPECIFICATIONS

Length	37' 5"	(11.41m)
Width	8' 2"	(2.50m)
Height	12' 8"	(3.87m)
Wheelbase	250"	(6,350mm)
Front axle weight	29,991 lbs	(13,604kg)
Rear axle weight	36,274 lbs	(16,454kg)
Approx total weight	66,265 lbs	(30,058kg)

Based on Model MACK MRU 613 with .16H pump cell.

Weights are approximate and include pump, boom, truck, driver and some fuel. Varies with options selected. Dimensions will vary with different truck makes, models and specifications.

## BOOM SPECIFICATIONS | Z-FOLD DESIGN

### Height & Reach

Vertical reach	136' 6"	(41.60m)
Horizontal reach	122' 5"	(37.30m)
Reach from front of truck*	113' 2"	(34.50m)
Reach depth	101' 8"	(31.00m)
Unfolding height	28' 3"	(8.60m)

### 5-Section Boom

1st section articulation	90°	
2nd section articulation	180°	
3rd section articulation	180°	
4th section articulation	246°	
5th section articulation	235°	
1st section length	24' 11"	(7.60m)
2nd section length	21' 0"	(6.40m)
3rd section length	23' 7"	(7.20m)
4th section length	26' 7"	(8.10m)
5th section length	27' 3"	(8.30m)

### General Specs

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	24' 7"	(7.50m)
hydraulically extend out & down		
Outrigger spread L - R — rear	25' 11"	(7.90m)
hydraulically swing out & extend down		

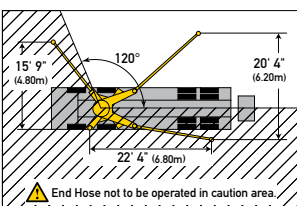
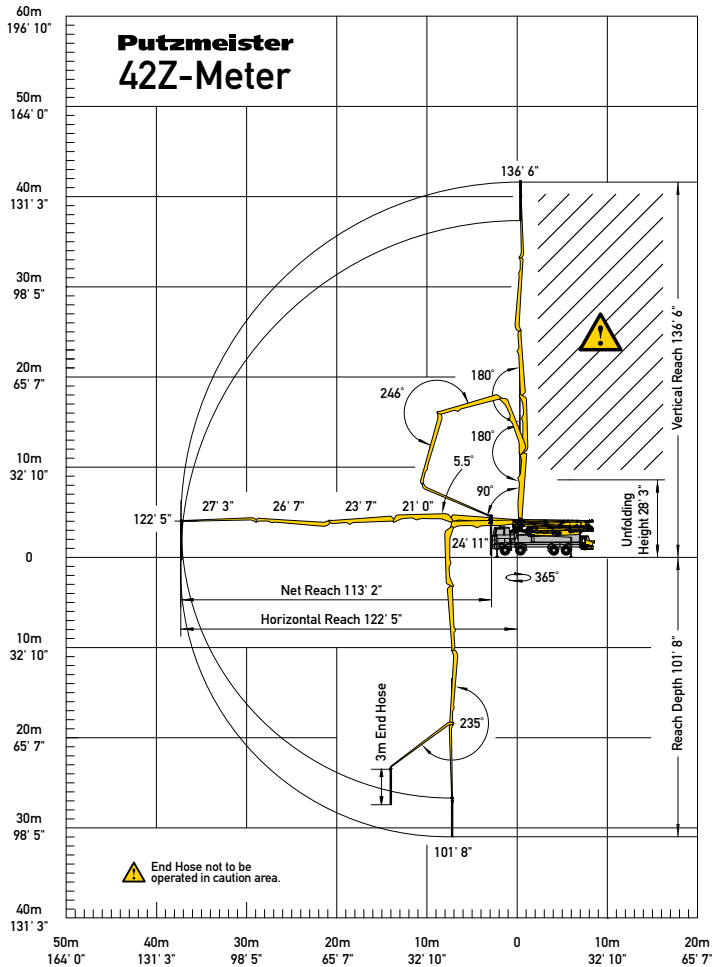
## PUMP SPECIFICATIONS

	42Z.16H	42Z.18H LS
Output — rod side	210 yd <sup>3</sup> /hr (160m <sup>3</sup> /hr)	—
— piston side	141 yd <sup>3</sup> /hr (108m <sup>3</sup> /hr)	238 yd <sup>3</sup> /hr (182m <sup>3</sup> /hr)
Pressure — rod side	1,233 psi (85 bar)	—
— piston side	1,885 psi (130 bar)*	1,233 psi (85 bar)
Material cylinder diameter	9" (230mm)	10" (250mm)
Stroke length	83" (2,100mm)	83" (2,100mm)
Max strokes per minute — rod side	31	—
— piston side	21	29
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	5.5" (140mm)	5.5" (140mm)
Rod diameter	3.1" (80mm)	3.1" (80mm)
Maximum size aggregate	2.5" (63mm)	2.5" (63mm)
Water tank— pedestal	185 gal (700L)	185 gal (700L)

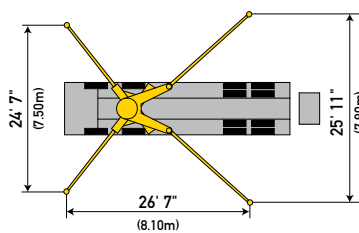
Maximum theoretical values listed.

\* 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)

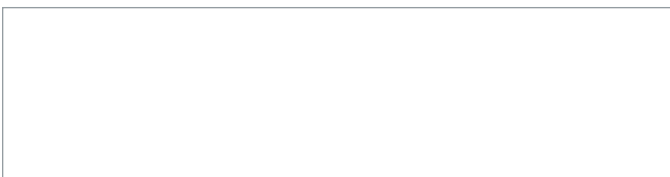


With One-Sided Support (OSS) 120°



Photos and drawings are for illustrative purposes only.

Authorized Distributor



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