# R Putzmeister

47Z-METER | TRUCK-MOUNTED CONCRETE BOOM PUMP



# A NEW STANDARD OF INNOVATION AND EXCELLENCE

#### PRECISE ENGINEERING, SUPERIOR PERFORMANCE

From increased maneuverability and ease of use, to a brand-new, state-of-the-art remote control system, the redesigned 47Z-Meter redefines innovative engineering. With the five-section, Z-fold boom and new, more robust pedestal design, the pump can navigate even the most congested job sites.

The new 47Z is designed with reduced gross vehicle weight,

improved pipe layout, and increased parts commonality. The pump's brand-new Ergonic 2.0 Control System delivers a more reliable and customizable experience. Meanwhile, its Ergonic Graphic Display has moved from the control box to the handheld Radio Remote Control, allowing the operator to view the live screen while controlling the pump remotely. Everything about the new 47Z was designed with the end-user in mind.



#### **ERGONIC® 2.0 ADVANTAGE**



#### ERGONIC<sup>®</sup> PUMP SYSTEM (EPS) WITH <sup>3</sup> ERGONIC<sup>®</sup> OUTPUT CONTROL (EOC)

EPS Takes control of the concrete pump, ensuring a fully optimized pumping process. While the EOC component regulates the optimum engine speed, ensuring that the concrete pump operates smoothly with fuel efficiency and low wear.



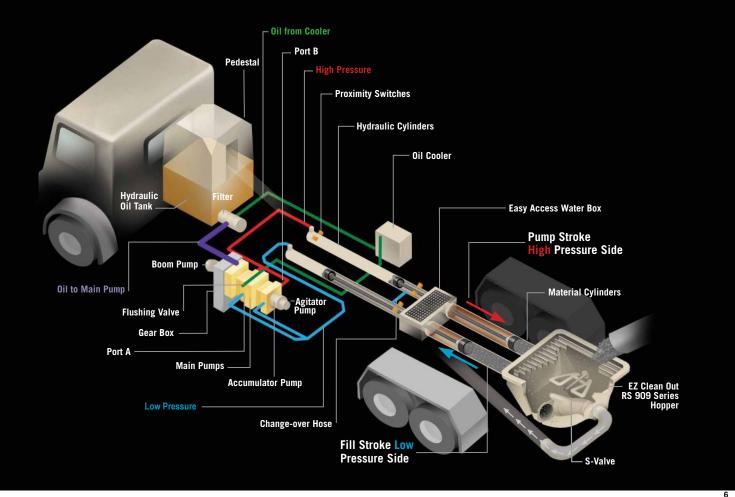
#### **ERGONIC® FFS**

The Ergonic 2.0 remote control is easy to handle and extremely lightweight — a whole 30 percent lighter than the previous model. Its ergonomic boom control with joystick, ensures convenient operation and up-to-date feedback, as well as system information for the machine.



#### EGD-RC — ERGONIC<sup>®</sup> GRAPHIC DISPLAY (RADIO) REMOTE CONTROL

The EGD-RC provides a transparent overview of the pumps' and machine status as well as the pump settings, ensuring convenient operation. The well thought-out menu, and ease of controlling the pump, along with the high-resolution color display offers a clear readability and convenient operation.



## 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

- 151' 3" (46.10m) vertical reach
- Versatile 5-section Z-Fold boom
- Manual lubrication, optional auto lubrication
- Integrated work lights

#### **BOOM OPERATION AND CONTROL**

- Fully proportional Ergonic 2.0 HBC radio remote with backup cable
- Gauge Port Central (GPC)
- Modular Boom Controls (MBC)
- 24V electrical system

#### **DELIVERY LINE**

- 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
- Easy lift-out brackets for simple delivery line replacement
- Standardized elbows and straight pipe sections
- Common component availability and easy replacement

#### PEDESTAL

- Rotation bearing and access openings simplify turret pipe changes
- Fully integrated pedestal design absorbs all forces
- Easy access large single-suction filter with indicator gauge
- Condensation trap in the hydraulic tank for water collection
- Two spacious decks for convenient pipe and hose storage
- Manual lubrication, optional auto lubrication
- Side-mounted aluminum toolboxes
- Integrated LED work lights
- Breakaway rear steps

#### OUTRIGGERS

- Quick setup on restrictive job sites
- Fully hydraulic outriggers with integral cylinders
- "X" brace outrigger system
- Front outriggers hydraulically extend out and down
- Rear outriggers hydraulically swing out and extend down
- Four outrigger pads in two side compartments
- Bubble level indicators
- Auxiliary fuel tank in outrigger
- One-Sided Support (OSS) system featuring a 135° working range.

#### CONCRETE PUMP

- Ergonic 2.0 control system with Ergonic Graphic Display Radio Remote Control (EGD-RC)
- Free flow hydraulic system for smooth, controllable pumping
- Multi-piece piston cup design
- Hard-chromed material cylinders
- Redundant proximity sensor system with function indicators replaced by display on EGD-RC
- 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

- Large 19.4 ft<sup>3</sup> (550L) capacity
- Grate-mounted vibrator
- Hopper grate RFID safety switch
- Hinged splash guard covers hopper during transit
- Low hopper height allows easy discharge from a mixer truck
- Automatic Iubrication
- Hopper work light

#### S-VALVE

- 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

- Fast and easy clean out
- 406 psi (28 bar) hydraulically-driven water pump
- Wash out kit and hose
- Integrated 40 gallon (145L) water tank in pedestal, 153 gallon (580L) water tank in outrigger



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.

### PUTZMEISTER | BOOM PUMP ADVANTAGE



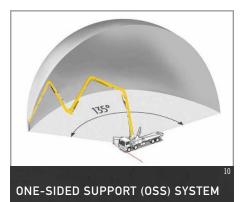
Putzmeister's "smart design" boom incorporates welding seams below the edge of maximum stress. The new 47Z rectangle boom design minimizes boom bounce, and is easier for the hoseman to maneuver. The boom features more straight pipe for a less stressful concrete flow and longer wear on parts. The Z-Fold configuration handles space-restrictive areas and can pump even when the boom is not fully extended. Putzmeister's boom design is highly responsive and has been optimized for the greatest maneuverability and flexibility available, resulting in a larger operational range.



Tailored to meet the needs of owners, operators and service personnel, the 47Z offers an innovative, user-friendly design. The pump features improved access to components, new LED lighting features for added safety and usability, and bolted connections throughout, allowing for greater flexibility and reduced downtime.



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.



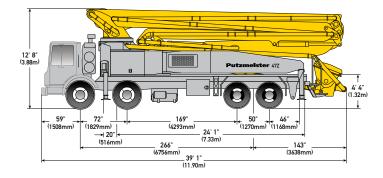
For enhanced job site versatility, Putzmeister's unique OSS system allows the operator to reduce the outrigger extension on one side of the unit to create a smaller overall machine footprint. Utilizing a series of sensors, OSS enables the unit to maintain a defined and safe 135 degree working envelope on space restrictive sites that demand a larger boom.

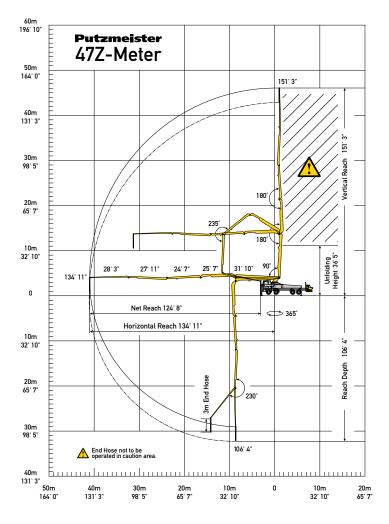


The Putzmeister 47Z-Meter Truck-Mounted Concrete Boom Pump offers a variety of features to reduce overall operational costs, including efficient free-flow hydraulics and an Ergonic operational system, standardized and maintenance-free parts, and a reduced amount of functional fluids. The 47Z also uses fewer specialty components and offers a longer wear of boom pipeline, further reducing costs.

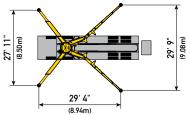


Switch gears and save with Putzmeister's patented Econo-Gear™. The exclusive design allows the Mack chassis engine to run at a lower rpm, achieving less stress on wear parts, lower noise levels and reduced fuel consumption. Econo-Gear makes a significant impact on job site safety and profitability with an estimated 10-15% savings.





22' 3" (6.79m) 8" (7.53m) 🕂 End Hose not to be operated in caution area



With One-Sided Support (OSS) 135°

Photos and drawings are for illustrative purposes only.

Authorized Distributor

JUALIT

ISO 9001:200

H Ĥ P Canada's Exclusive Putzmeister Dealer Toronto: 1810 Meyerside Dr., Mississauga, ON L5T 1B4 416.749.2843 Montreal: 1855 Rue Cunard, Laval, QC H7S 2C7 514.884.0076 Fax: 647.776.3122 www.cancrete.ca

sales@cancrete.ca 

© Putzmeister America, Inc. 2017 Printed in the USA (2.51701)

#### **47Z-METER TRUCK-MOUNTED SPECIFICATIONS**

39'1"	(11.90m)
8' 2"	(2.50m)
12' 8"	(3.88m)
266"	(6,756mm)
32,831 lbs	(14,892 kg)
37,289 lbs	(16,914 kg)
70,120 lbs	(31,806 kg)
	8' 2" 12' 8" 266" 32,831 lbs 37,289 lbs

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	151' 3"	(46.10m)
Horizontal reach	134' 11"	(41.10m)
Reach from front of truck*	124' 8"	(38.00m)
Reach depth	106' 4"	(32.40m)
Unfolding height	36' 5"	(11.10m)
5-Section Boom		
1st section articulation	90°	
2nd section articulation	180°	
3rd section articulation	180°	
4th section articulation	235°	
5th section articulation	230°	
1st section length	31' 10"	(9.70m)
2nd section length	25' 7"	(7.80m)
3rd section length	24' 7"	(7.49m)
4th section length	27' 11"	(8.50m)
5th section length	28' 3"	(8.60m)
General Specs		
Pipeline Size (ID) metric ends	5"	(125mm)
Rotation	365°	
End hose — length End hose — diameter	10' 0"	(3.00m)
	5"	(125mm)
Outrigger spread L - R — front	27' 11"	(8.50m)
hydraulically extend out & do	wn 29'9"	(0.09m)
Outrigger spread L - R — rear hydraulically swing out & ext		(9.08m)
njuruunounj oning our a okr		
PUMP SPECIFICATIONS	47Z.16H	47Z.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)
Maximum strokes per minute		
— rod side	31	
— piston side	21	29
Volume control	0-Full	0-Full
Vibrator	Standard	Standard
Hard-chromed material cylinder		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" (125mm)
Rod diameter	3.1" (80mm)	3.1" (80mm)

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)



Fax

Putzmeister America, Inc. 1733 90th Street Sturtevant, WI 53177 USA

(262) 886-3200 Phone Toll-free (800) 884-7210 (262) 884-6338

CB 4654 US

