Putzmeister

56Z-METER | TRUCK-MOUNTED CONCRETE BOOM PUMP
DO MORE FOR LESS

With the 56Z-Meter, Putzmeister makes it possible to get the reach of the 50-meter class in a boom pump with a smaller footprint. Weighing in at 100,000 pounds, the 56Z-Meter is light and with the industry’s most compact footprint, it can maneuver and pump in spaces where other 50-meter class booms simply cannot fit. Its two-section outriggers featuring our One-Sided Support (OSS) system help make deployment in extremely confined spaces possible. Combine that with a 181’ 0” vertical reach, and the maneuverability of the 56Z-Meter is tough to beat.

The flexibility of the boom’s five-section Z-Fold design further enhances both placement options and the all-around convenience of this 50-meter class model. For maximum versatility, the boom’s sections can be deployed in either the ‘Z’ position or the ‘A-Frame’ configuration, depending on the application requirements. Designed and built with customary Putzmeister flexibility, strength, and dependability, the 56Z-Meter brings together world-class design and user value in a package that is both site-friendly and fully compliant with DOT weight restrictions.
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. Removing and cooling only this minimal amount of oil is possible because, unlike an open loop system, the oil flows freely without passing through any unnecessary valves that can generate heat.

The closed loop also requires far less oil to run the system, as a larger reservoir is not necessary to cool all of the oil.

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
- 181’ 0” (55.17m) vertical reach
- Versatile 5-section Z-Fold boom
- Automatic lubrication
- Integrated work lights

BOOM OPERATION AND CONTROL
- Smooth and precise boom positioning at greater distances
- Fully proportional HBC radio remote
- Fully proportional remote with 164’ 0” (50m) 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 45˚ and 90˚ elbows and straight pipe sections
- Improved pipe layout reduces pipe wear
- 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
- Increased deck space and payload capacity for pipe and hose storage
- Automatic lubrication
- Side-mounted aluminum toolboxes
- Integrated work lights
- Breakaway rear steps

OUTRIGGERS
- 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
- Fuel tank in outrigger – 212 gallon (803L)
- One-Sided Support (OSS) system featuring a 120° working range

CONCRETE PUMP
- Ergonic® Pump System (EPS) with color Ergonomic 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
- 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
- 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 185 gallon (700L) water tank in pedestal

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’s robust, yet lightweight EZ Clean Out RS 909 hopper is engineered for performance and durability. Offering 19.4 ft³ (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.

Putzmeister’s “smart design” boom incorporates welding seams below the edge of maximum stress. The new 56Z 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.

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.

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.

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.
56Z-METER TRUCK-MOUNTED SPECIFICATIONS

**Length**: 46' 4" (14.12m)
**Width**: 8' 2" (2.50m)
**Height**: 13' 1" (3.99m)
**Wheelbase**: 322" (8,179mm)
**Front axle weight**: 51,333 lbs (23,284kg)
**Rear axle weight**: 48,967 lbs (22,211kg)
**Approx total weight**: 100,300 lbs (45,496kg)

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

Weights are approximate and include pump, boom, truck, driver and full fuel. Varies with options selected.

Dimensions will vary with different truck makes, models and specifications.

BOOM SPECIFICATIONS | Z-FOLD DESIGN

**Height & Reach**
- Vertical reach: 181' 0" (55.17m)
- Horizontal reach: 163' 9" (49.90m)
- Net reach: 152' 4" (46.43m)
- Unfolding height: 51' 2" (15.60m)

**5-Section Boom**
- 1st section articulation: 90°
- 2nd section articulation: 180°
- 3rd section articulation: 180°
- 4th section articulation: 234°
- 5th section articulation: 210°
- 1st section length: 34' 2" (10.41m)
- 2nd section length: 26' 8" (8.12m)
- 3rd section length: 30' 6" (9.30m)
- 4th section length: 37' 8" (11.48m)
- 5th section length: 38' 9" (11.80m)

**General Specs**
- Pipeline Size (ID) metric ends: 5" (125mm)
- Stroke length: 83" (2,100mm)
- Maximum strokes per minute:
  - Rod side: 31
  - Piston side: 21

**Pump Specifications**

<table>
<thead>
<tr>
<th>56Z.16H</th>
<th>56Z.18H LS</th>
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</thead>
<tbody>
<tr>
<td>Output</td>
<td>210 yd³/hr (160m³/hr)</td>
</tr>
<tr>
<td>Pressure</td>
<td>1,233 psi (85 bar)</td>
</tr>
<tr>
<td>Material cylinder diameter</td>
<td>9&quot; (230mm)</td>
</tr>
<tr>
<td>Stroke length</td>
<td>83&quot; (2,100mm)</td>
</tr>
<tr>
<td>Maximum strokes per minute:</td>
<td></td>
</tr>
<tr>
<td>Rod side:</td>
<td>31</td>
</tr>
<tr>
<td>Piston side:</td>
<td>21</td>
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**Volume control**: 0-Full

**Vibrator**: Standard

**Hard-chromed material cylinders**: Standard

**Hydraulic system**: 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)

End hose not to be operated in caution area.

End Hose not to be operated in caution area.

With One-Sided Support (OSS) 120°

Photos and drawings are for illustrative purposes only.

Authorized Distributor

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