The innovative, lightweight 36Z-Meter Concrete Boom Pump delivers greater payload capacity, longer pump life and a more user-friendly design for increased ease of service. The many improvements to the pump’s design allows each piece to work together seamlessly while improving overall usability.

With a gross vehicle weight of approximately 51,500 lbs. (26 tons), the 36Z weighs 5,000 lbs. (2 tons) less than the previous 36Z model. This allows for an increased payload capacity for job site equipment, water and fuel. The new 36Z has a three-axle chassis, which allows for less strict permits, or even no permits, depending on local requirements.

While the pedestal has remained the same size, the new design allows for approximately 30 percent more space because several components that were previously located on the deck have been moved. The more spacious deck allows for ease of movement during maintenance and service, and provides an increase in physical space for the payload. Since the pedestal sub-frame’s bolted connections allow for flexibility by adjusting to torsion from the force of the pump, the life of the pump is increased, while the chance for downtime is reduced.

The hydraulic system on the 36Z-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, with single bend in turret and only two elbow sizes — 45-degree and 90-degree — increases parts commonality and reduces wear.

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.
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
• 116’ 10” (35.60m) vertical reach
• Low unfolding height
• Versatile 4-section Z-Fold boom
• Manual lubrication, optional auto lubrication
• Integrated work lights

BOOM OPERATION AND CONTROL
• Fully proportional HBC radio remote
• Smooth and precise boom positioning at greater distances
• Fully proportional remote with 130’ (40m) 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
• ESSER 500 twin-pipe deck pipe with 900 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
• 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
• 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
• Optional auxiliary fuel tank
• Optional One-Sided Support (OSS) outriggers 120°

CONCRETE PUMP
• Ergonomic® Pump System (EPS) with color Ergonomic Graphic Display (EGD)
• Choose from high pressure or high volume with the same setup
• 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
• Hard-faced remixer paddle
• Grate-mounted vibrator
• Multi-piece grate featuring bolted connections
• 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

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.
Putzmeister’s “smart design” boom incorporates welding seams below the edge of maximum stress. The new 36Z 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.

The Frequency Hopping system on the standard HBC proportional radio remote ensures minimal interference with other frequency transmitters. Radiomatic Power Boost further enhances reception quality with a 50-100% increase in signal power. 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.

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 hard-faced remixer paddle motor and grate-mounted vibrator. The multi-piece grate features bolted connections that allow for easy maintenance. An innovative RFID safety switch incorporated in the hopper disables the machine when the grate is opened.

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.

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 Ergonomic 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.
36Z-METER TRUCK-MOUNTED SPECIFICATIONS

Length  36' 5"  (11.09m)
Width    8' 2"  (2.50m)
Height   13' 3"  (4.04m)
Wheelbase 215"  (5.461mm)
Front axle weight 17,000 lbs  (7,711kg)
Rear axle weight 34,500 lbs  (15,650kg)
Approx. total weight 51,500 lbs  (23,360kg)

Based on Model MACK MRU 613 with 36H 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 116' 10"  (35.60m)
Horizontal reach 103' 0"  (31.40m)
Reach from front of truck 94' 10"  (28.30m)
Reach depth 78' 5"  (23.90m)
Unfolding height 27' 11"  (8.50m)

4-Section Boom
1st section articulation 104°
2nd section articulation 180°
3rd section articulation 253°
4th section articulation 225°

1st section length 27' 11"  (8.50m)
2nd section length 24' 11"  (7.60m)
3rd section length 24' 11"  (7.60m)
4th section length 25' 11"  (7.90m)

Unfolding
Height 27' 11"  (8.50m)
Reach 103' 0"  (31.40m)
Net Reach 94' 10"  (28.90m)

4-Section Boom
1st section articulation 104°
2nd section articulation 180°
3rd section articulation 253°
4th section articulation 225°

1st section length 27' 11"  (8.50m)
2nd section length 24' 11"  (7.60m)
3rd section length 24' 11"  (7.60m)
4th section length 25' 11"  (7.90m)

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 18' 1"  (5.50m)
Outrigger spread L - R — rear 22' 8"  (6.90m)

PUMP SPECIFICATIONS 36Z.12H  36Z.16H

Output — rod side 124 yd³/hr (95m³/hr)  210 yd³/hr (160m³/hr)
— piston side 84 yd³/hr (64m³/hr)  146 yd³/hr (112m³/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 18  31
— piston side 12  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 5.1"  (130mm)  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)