



Putzmeister

TRUCK-MOUNTED CONCRETE BOOM PUMPS



**TIGHT DEADLINES, DEMANDS
FOR QUALITY CONCRETE
PLACEMENT AND BUDGET
CONCERNS. WHEN YOU HAVE
TOUGH JOBS IN FRONT OF
YOU, IT'S GOOD TO HAVE
PUTZMEISTER AMERICA
BESIDE YOU.**

FAR REACHING CAPABILITIES IN CONCRETE PLACEMENT

Recognized worldwide for technological and engineering excellence, Putzmeister is constantly bringing more of the innovations you need to our full line of powerful, job-tested truck-mounted concrete boom pumps. With models ranging from 20Z- to 63Z-Meter, we have a machine for any size job and standard features to get the job done right. In addition, each of our boom pumps includes smart, performance-driven advantages that you'll only find on a Putzmeister. This means greater performance now and higher resale value later.

Putzmeister is committed to helping you place concrete faster, further, more efficiently and with greater accuracy. While the Putzmeister name is synonymous with smooth and reliable pumping, our booms also offer versatility in configuration and reach to help you achieve time and labor savings.



ALL YOU NEED, MORE OF WHAT YOU WANT.

BUILT FOR PERFORMANCE

Manufacturing excellence starts with design and is realized on the production floor. The tandem efforts of craftsmen at our parent company in Germany and our 200,000-square-foot North American headquarters build the concrete boom pumps known and respected the world over.

Material and components that enter the production process are carefully inspected and tested before manufacturing begins. Only highly skilled and trained professionals work on Putzmeister's equipment.

From boom, modular flatpack and hydraulics system design to the showroom finish of a machine's custom paint job, every Putzmeister concrete boom pump is a reflection of the significant investment in our human and facilities resources.

IN THE MORE THAN 50 YEARS THAT PUTZMEISTER HAS BEEN DESIGNING AND MANUFACTURING CONCRETE BOOM PUMPS, WE HAVE CONTINUALLY COMMITTED OUR RESOURCES TO INVESTMENTS IN THE LATEST TECHNOLOGIES AND MOST HIGHLY QUALIFIED ENGINEERS AND PRODUCTION STAFF. WE PRODUCE BOOMS FOR OUR MACHINES AND ONLY OUR MACHINES.

ENGINEERED FOR EXCELLENCE

Working with state-of-the-art tools and the latest scientific information, Putzmeister engineers every boom to maintain structural integrity in critical areas without excess material. Our design approach takes a specification as its basis and conducts process simulations using Finite Element Analysis (FEA) and 3D Computer Aided Design (CAD). Lifecycle testing is then completed before a boom ever enters the production process. This ensures the reliability and durability of every boom we build.

Using high-tensile strength, fine-grain steels shaped and prepared to rigid specifications and variable wall thickness helps achieve optimum weight and promotes a longer boom life.

Putzmeister's exclusive "H-Box design" is best adapted to handle the day-to-day stresses of concrete pumping. Unlike the more commonly used standard box design, which places a welding seam precisely at the edge of maximum stress, the H-Box features horizontal plates that run perpendicular to the vertical plates below this critical area. Our advanced robotic welding process has been optimized to create a highly precise, 45-degree weld, which joins more surface area of the two plates than can be achieved in the standard box design. In short, the H-Box enables the finished boom to better adapt to load fluctuations that affect it while pumping concrete.



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INSIDE EVERY PUTZMEISTER ADVANCED TECHNOLOGIES



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S-VALVE TECHNOLOGY

Ideal for high pressure applications, Putzmeister's "Big Mouth" S-Valve effortlessly handles extremely harsh concrete mixes. Its thick-walled valve construction features exclusive hard-chromed material cylinders and a multi-piece piston cup design. The long and controlled reduction of the S-Valve ideally forms the concrete for pumping.

The durable and reliable S-Valve features:

- Reducer elbow made of manganese hard steel for resistance to wear.
- Huge 9" (230mm) intake opening to provide a superior filling rate.
- Long and gradual 9" to 7" (230 to 180mm) reduction to maintain boundary layer into the pipeline.



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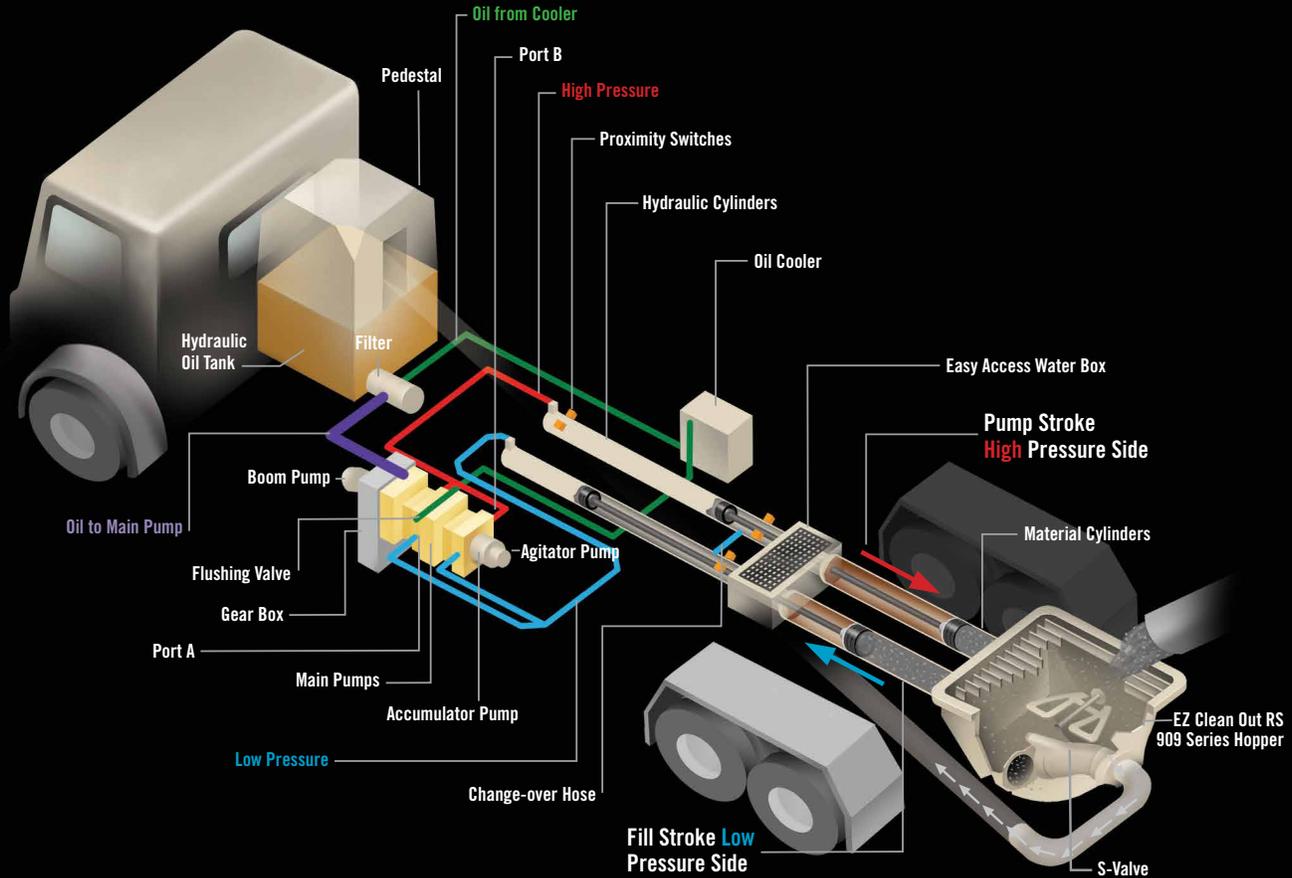
EZ CLEAN OUT RS 909 SERIES HOPPER

All Putzmeister boom pumps feature the robust yet lightweight EZ Clean Out RS 909 hopper, which is engineered for performance and durability. Offering 19.4 cu. ft. (550L) capacity, the hopper uses one remixer paddle motor and grate-mounted vibrator.

For added safety, the RS 909 hopper incorporates an RFID safety switch, preventing it from operating with the grate open and incorporating zero moving parts, while using the same advanced sensor technology shown to be effective and reliable in other Putzmeister systems.

Pump Cell Specifications			
Pump Models	.12H	.16H	.18H LS
Maximum output - rod side	144 yd ³ /hr (110m ³ /hr)	209 yd ³ /hr (160m ³ /hr)	—
Maximum output - piston side	97 yd ³ /hr (74m ³ /hr)	141 yd ³ /hr (108m ³ /hr)	238 yd ³ /hr (182m ³ /hr)
Maximum pressure - rod side	1233 psi (85 bar)	1233 psi (85 bar)	—
Maximum pressure - piston	1885 psi (130 bar)*	1885 psi (130 bar)*	1233 psi (85 bar)
side Material cylinder diameter	9" (230mm)	9" (230mm)	10" (250mm)
Stroke length	83" (2100mm)	83" (2100mm)	83" (2100mm)
Strokes per minute - rod/piston	21/14	31/21	-/29

*Standard delivery line system rated at maximum line pressure of 1233 psi (85 bar).



Generation 2 FFH featured on 36Z-, 38Z-5, 42Z- and 47Z-Meter. ⁸

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.

EXCLUSIVE SYSTEM RAISING THE BAR ON EXCELLENCE



ERGONIC® INSIDE

A system of microprocessor supported controls, Ergonic® technology goes beyond monitoring performance. It allows the operator to set parameters that control the pump, the boom and a variety of operational functions. It is housed in an easily accessible single Modular Control Box*.

On all models, this advanced technology includes the Ergonic Pump System (EPS), which optimizes the pump and other functions. Integral to EPS, Ergonic Output Control (EOC) reduces fuel consumption, wear and noise, adjusting the engine speed to the delivery rate.

EPS has considerable advantages over conventional hydraulic controls.

- Electronic regulation of the concrete pump ensures the pump runs at peak performance with the toughest concrete mixes
- Delivery pressure, delivery rate of the hydraulic pump, hydraulic pressure and many other signals are perfectly coordinated conventional hydraulic control systems do not offer this level of control.
- Greater efficiency can be achieved as a result of fewer hydraulic components. With EPS, a computer handles the role played by the valves, throttles and regulators. A limited number of hydraulic components are required, resulting in less energy loss in the system, which reduces wear and fuel consumption.
- Improved fill level of the concrete pump results in fewer strokes with the same output. This means less wear on the concrete pump and makes the pumping process significantly smoother.

ERGONIC® SYSTEM BENEFITS



ERGONIC PUMP CONTROL SYSTEM (EPS) ⁹

- A smoother pumping process
- Reduced component wear
- Low fuel consumption
- Fewer vibrations in the machine and boom
- Fully electronic control of the concrete pump
- Fewer hydraulic components
- Optimized output for greatest efficiency



ERGONIC OUTPUT CONTROL (EOC) ¹⁰

Integral to EPS, EOC reduces fuel consumption, wear and noise. EOC automatically adjusts the engine speed to the minimum required for the delivery rate specified by the operator on the remote control.



EGD-RC — ERGONIC® GRAPHIC DISPLAY (RADIO) REMOTE CONTROL ¹¹

The EGD-RC displays an overview of, critical pump/machine information and settings on a high-resolution color display. Operators can operate closer to the end hose with vital performance information and control settings.

MORE OPTIONS, MORE SOLUTIONS

Z-BOOM ADVANTAGE

Low ceiling heights and unusual concrete placing challenges are no match for the versatility of Putzmeister's Z-booms. From the compact 20Z-Meter up to the 63Z-Meter, Putzmeister has the right fit for your fleet. They set up easily in low overhead clearance conditions – even less than 13 feet.

Both the Multi-Z and Z-Fold configurations can begin a pour before the boom is fully unfolded. In addition, these four- and five-section boom pumps can easily maneuver around obstacles to achieve the maximum reach and flexibility possible, depending on application needs.



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ONE DETACHABLE BOOM, MULTIPLE USES

For added boom versatility and user-friendly features, request our detachable placing booms available on select boom pump models. For the contractor, they provide the quickest and easiest truck to tower conversion for greater efficiency on-site. For the owner, they maximize the capabilities of truck-mounted booms and provide added ways of generating revenue.

The Series II kit is available to fit your specific needs and can be installed with your initial boom pump order or added at a later date – a choice only Putzmeister's flexible design can offer. The kit also features a hydraulic connection, which allows the operator to couple and uncouple the hydraulic hoses when they're not under pressure. Topping it all off, these booms fit any modular Putzmeister pedestal and the Tower System.



1. Disconnect and lift

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2. Fly from truck to tower

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3. Position, pin and pump

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MORE STANDARD FEATURES AND MORE OPTIONS MEAN GREATER OPPORTUNITIES FOR YOUR BUSINESS. OUR DETACH BOOMS ALLOW YOU TO PUMP FROM THE TRUCK OR PLACE CONCRETE FROM PUTZMEISTER'S TOWER SYSTEM.

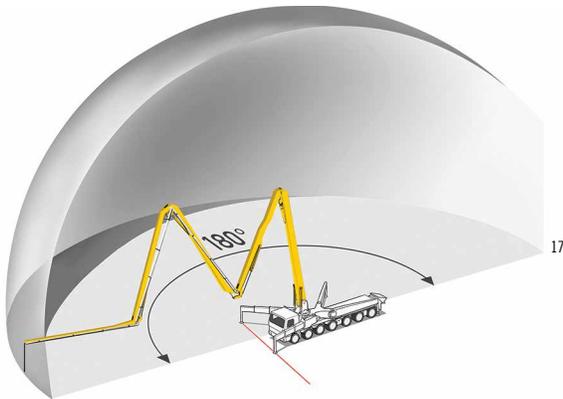
UNIQUE FEATURES WITH THE OPERATOR IN MIND

PUTTING SPACE ON YOUR SIDE

Allowing the boom pump operator to reduce the outrigger span on the non-working side of the unit, OSS safely achieves setup in tight spots without full deployment of the unit's outriggers. When properly deployed and the system's series of sensors are in full operation, OSS maintains a defined working envelope that prevents the operator from positioning the boom outside of a safe operational range.

Ideal for setup on busy streets or in tight spots on construction sites, OSS is a standard feature on Putzmeister's boom pump models from 42Z- through 63Z-Meter, and is optional on 31Z- through 40Z-Meter.

- **Models:** 20Z,28Z,31Z,33Z,36Z, 38Z-5,39Z,42Z,47Z,51Z,56Z have a 120 degree range
- **Model:** 63Z has a 180 degree range



AFM RADIO REMOTE

Ensuring minimum interference with other frequency transmitters, the HBC-Radiomatic Automatic Frequency Management (AFM) remote system defines four operation channels from the available channels and continuously updates the four channels based on signal strength.

A fully proportional cable remote is also standard. Unlike other remote control systems, the radio and cable remote systems are completely independent, offering redundancies to ensure complete proportional operation with either the radio or cable remote.

NEXT GENERATION BOOM PUMP DESIGN ADVANTAGES

Through technology breakthroughs, Putzmeister truck-mounted boom pumps offer greater payload capacity, less down time and reduced maintenance costs.

LIGHTER WEIGHT WITH GREATER PAYLOAD CAPACITY

Designed with the operator in mind, all newer Putzmeister models are lighter weight to offer greater capacity for payload, water and fuel, while offering significantly more deck space for job site equipment and ease of movement around the deck.



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.



IMPROVED PIPE LAYOUT

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



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BOLT-ON PIPE HANGER BRACKETS

Bolt-on pipe hanger brackets are stronger, more durable and more flexible than welded pipe hanger brackets and can easily be replaced if necessary.



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Partial Flow dehydrator/filter

As a result of ambient humidity, splash water and water ingested past hydraulic seals on cylinders-water in hydraulic oil promotes degradation and accelerates aging. Water in a hydraulic system will increase cavitation, foaming, and reduce lubrication; resulting in component wear, maintenance and failure.

Putzmeister's optional on-board oil dehydrator/filter is specifically designed to efficiently remove water and keep the oil in optimum condition. It is integrated directly into the boom pump and operates continuously while the chassis is running via a dedicated switch in the cab. Operation of the pump maintains heat in the oil required for proper dehydration.

Unlike other systems, Putzmeister's oil dehydrator/filter uses dry chassis air and not expensive removable cartridges to affordably eliminate the negative effects of water and contaminants in oil.



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SAVE FUEL. USE ECONO-GEAR™

Developed in 1997, and available exclusively on Putzmeister truck-mounted concrete boom pumps mounted to Mack chassis, Econo-Gear™ puts the Putzmeister pump into its own version of overdrive. Allowing the operator to complete the vast majority of everyday jobs while being 10 to 15 percent more fuel efficient.

PUTZMEISTER'S TRUCK-MOUNTED CONCRETE BOOM PUMP MODELS

20Z-Meter // Pump Cell .12H	Z-Fold Boom	 <p>Boom Sections 4-Section</p> <p>Vertical Reach 63' 10" (19.46m)</p> <p>Horizontal Reach 53' 10" (16.43m)</p> <p>Net Reach* 44' 3" (13.51m)</p>	<p>Reach Depth 36' 6" (11.15m)</p> <p>Unfolding Height 12' 9" (3.91m)</p> <p>Front Outrigger Spread 11' 1" (3.40m)</p> <p>Rear Outrigger Spread 8' 5" (2.59m)</p>
28Z-Meter // Pump Cell .12H, .16H	Z-Fold Boom	 <p>Boom Sections 4-Section</p> <p>Vertical Reach 89' 7" (27.31m)</p> <p>Horizontal Reach 78' 1" (23.80m)</p> <p>Net Reach* 69' 2" (21.08m)</p>	<p>Reach Depth 54' 4" (16.60m)</p> <p>Unfolding Height 21' 3" (23.01m)</p> <p>Front Outrigger Spread 20' 4" (6.22m)</p> <p>Rear Outrigger Spread 8' 7" (2.62m)</p>
31Z-Meter // Pump Cell .12H, .16H	Z-Fold Boom	 <p>Boom Sections 5-Section</p> <p>Vertical Reach 101' 8" (31.0m)</p> <p>Horizontal Reach 86' 3" (26.30m)</p> <p>Net Reach* 77' 1" (23.50m)</p>	<p>Reach Depth 65' 3" (19.90m)</p> <p>Unfolding Height 19' 8" (6.00m)</p> <p>Front Outrigger Spread 18' 0" (5.5m)</p> <p>Rear Outrigger Spread 23' 7" (7.2m)</p>
33-Meter // Pump Cell .16H, .18H LS	Z-Fold Boom	 <p>Boom Sections 4-Section</p> <p>Vertical Reach 105' 3" (32.10m)</p> <p>Horizontal Reach 100' 0" (30.50m)</p> <p>Net Reach* 91' 2" (27.80m)</p>	<p>Reach Depth 67' 10" (20.70m)</p> <p>Unfolding Height 24' 11" (7.60m)</p> <p>Front Outrigger Spread 18' 1" (5.50m)</p> <p>Rear Outrigger Spread 24' 1" (7.30m)</p>
36Z-Meter // Pump Cell .12H, .16H, .18H LS	Multi-Z Boom	 <p>Boom Sections 4-Section</p> <p>Vertical Reach 117' 1" (35.7m)</p> <p>Horizontal Reach 103' 0" (31.4m)</p> <p>Net Reach* 94' 1" (28.7m)</p>	<p>Reach Depth 76' 1" (23.2m)</p> <p>Unfolding Height 27' 6" (8.51m)</p> <p>Front Outrigger Spread 18' 1" (5.50m)</p> <p>Rear Outrigger Spread 24' 1" (7.30m)</p>
38Z-5-Meter // Pump Cell .12H, .16H, .18H LS	Z-Fold Boom	 <p>Boom Sections 5-Section</p> <p>Vertical Reach 123' 0" (37.50m)</p> <p>Horizontal Reach 107' 7" (32.80m)</p> <p>Net Reach* 99' 4" (30.30m)</p>	<p>Reach Depth 83' 0" (25.30m)</p> <p>Unfolding Height 24' 3" (7.40m)</p> <p>Front Outrigger Spread 20' 8" (6.30m)</p> <p>Rear Outrigger Spread 24' 8" (87.5m)</p>

39Z-Meter // Pump Cell .13HPD, .16H, .18H LS Z-Fold Boom



Boom Sections	4-Section	Reach Depth	78' 8" (24.00m)
Vertical Reach	126' 3" (38.50m)	Unfolding Height	29' 6" (9.00m)
Horizontal Reach	110' 2" (33.60m)	Front Outrigger Spread	20' 8" (6.30m)
Net Reach*	100' 9" (30.70m)	Rear Outrigger Spread	24' 8" (7.50m)

42Z-Meter // Pump Cell .16H, .18H LS Z-Fold Boom



Boom Sections	5-Section	Reach Depth	101' 8" (31.00m)
Vertical Reach	136' 5" (41.60m)	Unfolding Height	28' 2" (8.60m)
Horizontal Reach	122' 4" (37.30m)	Front Outrigger Spread	24' 7" (7.50m)
Net Reach*	113' 2" (34.50m)	Rear Outrigger Spread	27' 3" (8.31m)

47Z-Meter // Pump Cell .16H, .18H LS Z-Fold Boom



Boom Sections	5-Section	Reach Depth	106' 3" (32.40m)
Vertical Reach	151' 2" (46.10m)	Unfolding Height	36' 5" (11.10m)
Horizontal Reach	134' 10" (41.10m)	Front Outrigger Spread	27' 10" (8.50m)
Net Reach*	124' 8" (38.00m)	Rear Outrigger Spread	29' 9" (9.08m)

51Z-Meter // Pump Cell .16H, .18H LS Z-Fold Boom



Boom Sections	5-Section	Reach Depth	114' 6" (34.90m)
Vertical Reach	164' 4" (50.10m)	Unfolding Height	33' 5" (10.20m)
Horizontal Reach	147' 3" (44.90m)	Front Outrigger Spread	30' 6" (9.30m)
Net Reach*	132' 2" (40.30m)	Rear Outrigger Spread	32' 2" (9.80m)

56Z-Meter // Pump Cell .16H, .18H LS Z-Fold Boom



Boom Sections	5-Section	Reach Depth	132' 2" (40.30m)
Vertical Reach	180' 9" (55.10m)	Unfolding Height	51' 6" (15.70m)
Horizontal Reach	163' 8" (49.90m)	Front Outrigger Spread	30' 6" (9.30m)
Net Reach*	149' 7" (45.60m)	Rear Outrigger Spread	35' 5" (10.80m)

63Z-Meter // Pump Cell .16H, .18H LS Z-Fold Boom



Boom Sections	5-Section	Reach Depth	151' 10" (46.30m)
Vertical Reach	203' 8" (62.10m)	Unfolding Height	75' 5" (23.00m)
Horizontal Reach	190' 7" (58.10m)	Front Outrigger Spread	38' 4" (11.60m)
Net Reach*	175' 2" (53.40m)	Rear Outrigger Spread	42' 1" (12.80m)

* Reach applies to units mounted on standard PMA stock trucks. Specifications subject to change without prior notification. Photographs represented in this brochure are for informational purposes only and may depict optional or additional equipment not offered as standard. Always refer to the appropriate operational manual for safe and proper operation of Putzmeister equipment.

SOLUTIONS DELIVERED

Any company can say they do more, but the proof is in the offering. When you're putting together a concrete pumping fleet, it's important to work with a company that's with you every step of the way. Rest assured that with every Putzmeister you have the full backing of our company in the form of:

CUSTOMER SUPPORT AND SERVICE

In addition to 24/7 technical support, Putzmeister has experienced Field Service Technicians available for Boom Pump start-ups. The comprehensive operators manual and QuickStart DVD program are enhanced by classroom and hands-on service training.

PARTS AND ACCESSORIES

Not all parts are created equal. Putzmeister offers longer lasting, better performing parts under increased wear conditions. Our in-stock inventory includes more than 20,000 parts totaling more than \$40 million dollars. This means greater savings and less downtime.



QUALITY AND SUPPORT

From questions you may have before your purchase to technical expertise you need right on the job site, you're never alone with Putzmeister.

Choose Putzmeister and you get more than equipment. You have a promise of performance. For more information on Putzmeister's full line of truck-mounted concrete boom pumps and extensive range of material placing equipment, please contact your authorized Putzmeister distributor.

You can also call us direct at (800) 884-7210 or visit PutzmeisterAmerica.com.



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