



**Putzmeister**



# 20Z Truck-Mounted Boom Pump

Technical specifications

# Compact machinery for large undertakings

## Unimpeded deployment in the smallest possible space

This small pump prevails in the most confined spaces. With the low unfolding height of 3.9 meters, the 20Z is perfect for pumping concrete in the most restrictive jobsites: halls, under bridges, underpasses, or multi-storey buildings are a breeze with the 20Z.

### A lightweight boom

The lightweight 4-arm boom can be quickly unfolded, saving you valuable working time. The weight saving can be used for a higher payload, and in cramped conditions requiring precise boom movements, the low weight ensures direct response and user-friendly handling.

## Benefits at a glance

### Boom

- 4-section Multi-Z boom design
- Integrated safety platform
- More flexibility in the boom eliminates dead space
- Low unfolding height
- Fast control response characteristics
- Lubrication for first boom cylinder and slewing bearing
- Standard 90° and 45° elbows, with lengthened collars for a longer service life

### Pedestal

- Low weight offers high payload capacity
- Plenty of storage space on the deck

### Pump

- Engineered for all common concrete types
- Service-friendly control system with exclusive free flow hydraulics
- Wear-resistant design of S-Valve
- Easily accessible hopper for cleaning, with hinged and pivotable 90° delivery line bend and connection for pipelines on the right and left side
- Hopper agitator safety shutdown via Radio Frequency Identification (RFID)
- Automatic agitator direction of rotation corresponds to pumping direction
- Optimized pumping with EPS and EOC
- Optimized switchover procedure with SN control system and Push-Over avoids wear-intensive pressure peaks



**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.

# Features & options



## The smallest footprint

Only the 20Z can offer such a support area: 3.40 m at the front and just 2.60 m at the rear. The compact TR support from Putzmeister allows unimpeded flow of traffic in almost any job site situation. The low vehicle height is also ideal for passing through most bridges and underpasses, and low weight means it has reserves for operating materials and accessories.

## Standard features

### Concrete Pump Unit

- Free flow hydraulics
- Multi-piece piston cups
- S-Valve - 2318 hard-faced (9" to 7")
- RS 909 clean out hopper w/ solid polyurethane fold down back splash
- Hardox remixer paddles
- Hopper vibrator
- Hopper agitator safety shutdown via Radio Frequency Identification (RFID)
- Hard-chromed material cylinders
- Proximity switches w/ indicator
- Manually extended hydraulic down front outriggers, hydraulic down rear outriggers
- Snap-locks for outriggers & bubble level indicators
- 706 psi (28 bar) high pressure water pump
- 172 gal (650L) steel water tank
- Manual grease system - boom
- Auto-lube grease system - hopper
- Centralized lube locations
- Gauge Port Central (GPC)
- Loading decks for pipe & accessories
- Modular bolt-on flatpack
- Large side-mounted aluminum toolboxes
- Swing out step (left side)
- Operator Supervision Warning System (OSWS)
- 5" delivery line on all boom & deck pipe
- Proline 2000 Putzmeister Pipe Technology
- 10 ft (3m) delivery hose w/ coupling (one end)
- Electric oil cooler
- Wash out kit & hose
- Light kit package at boom, pedestal, & hopper
- 4 outrigger pads w/ 2 side compartments
- Wireless & cable remote

### Unit Control System

- Ergonic 1.0 Pump System (EPS) w/ Ergonic Output Control (EOC) - Color Gen 4 Ergonic Graphic Display (EGD) in control cabinet
- Standard world pattern
- Radio remote w/ Ergonic Graphic Display Remote Control (EGD-RC) w/ full proportionality & 20m cable back-up option
- Cable remote w/ full proportionality
- Remote on/off of concrete pump & remote engine off

### Miscellaneous

- Ship-away kit w/ basic maintenance tools
- Operational & safety manuals
- High quality paint finish

# Features & options

## RS 909 Hopper

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

### RS 909 Hopper features

- Hinged splash guard
- Automatic lubrication
- Hopper work light
- Hard-faced S-Valve
- Gradual 9" to 7" (230mm to 180 mm) reduction
- Thick-walled valve construction
- Fast and easy clean out
- 406 psi (28 bar) hydraulic water pump
- Wash out kit and hose
- 40 gallon (145 L) pedestal water tank, 153 gallon (580 L) outrigger water tank



## The Swing Elbow: Two machines in one

The 20Z features a 90° Swing Elbow used to connect a hose directly to the hopper, allowing the unit to function as not only a boom pump but also as a line pump with rod side pressure up to 85 bar. The elbow can be used for everyday operation, and is easily cleaned using standard cleaning procedures.

## Other Available Options

Auto Lube System - Boom

High pressure washer (2000 psi / 138 bar)

Oil tank heater

Partial Flow Filter / Dehydrator

Squeeze valve air line installation

Squeeze valve installation w/ PM EQV part

Wash-out hose reel kit

Water tank heater

# The concrete pump highlights

## Optimal coordination thanks to EPS

EPS (Ergonic® Pump System) is a computer-aided control system that provides a smoother performance by reducing boom vibrations. In addition to EPS, EOC (Ergonic® Output Control) is an efficient module that controls the engine speed with lower fuel consumption, wear, and noise.

## The pump at a glance

- Pump geometry is optimally engineered for all common types of concrete
- Service-friendly control system with free flow hydraulics for consistently high oil quality
- Agitator safety shutdown via RFID (Radio Frequency Identification)
- Optimized switchover procedure with SN control system and Push Over to avoid wear-intensive pressure peaks
- Wear-resistant design of S transfer tube switch for long service life
- Convenient and simple operation with Ergonic® System
- Automatic agitator direction of rotation corresponds to pumping direction

## Smooth operation

Smooth, optimized pumping with EPS and EOC, protects the pump and the vehicle

## Hopper

Optimized hopper with grille, improved shape, and optimized S transfer tube storage

## Component replacement

Easy replacement of components due to bolt-on concept and minimum operating costs thanks to maintenance-free components, avoidance of special components, and easy accessibility.

**LONGER SERVICE LIFE**  
**LOW MAINTENANCE**  
**OPTIMIZED EFFICIENCY**  
**SERVICE-FRIENDLY**  
**SIMPLE OPERATION**  
**BEST PERFORMANCE!**

# Ergonic® System – highlights

## Ergonic® Pump System – the heart of performance

The computer-aided EPS control system regulates the operation of the concrete pump and the truck engine, enabling forward/reverse pumping with adjustable output. This results in fewer hydraulic components, less wear, and reduced energy consumption. The pumping process is smoother with less boom vibrations, taking stress off the concrete pump and vehicle.

- **Reduced wear** with fewer components and lower service costs
- **Reduced vibrations** in the boom and machine
- **Optimized, smooth pumping**
- **High-quality components** for less down-time and maintenance

# CONVENIENCE AND COST-EFFICIENCY

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# ERGONIC® SYSTEM

## Pumping made smart

If our concrete pumps are the heart of Putzmeister machines, then the Ergonic system is the brain.

As a switching center, the microprocessor-supported control systems regulate the functions of concrete pumps and placing booms.

## Always by your side – Ergonic® inside

### **EPS** Ergonic Pump System

Takes control of the concrete pump for optimized pumping.

### **EOC** Ergonic Output Control

Regulates the optimum motor speed for smooth operation with fuel efficiency and low wear.

## Ergonic<sup>®</sup> Output Control (EOC) – the optimum speed at all times

EOC reduces fuel consumption, wear, and noise. The machine operator sets the output using the radio remote control and EOC controls the optimum speed. Both the delivery pressure and the output can be limited depending on the application. If the boom is not moved and the pump is off, the engine will revert to idling speed which can reduce fuel consumption up to 10%.

- **Lower fuel consumption and reduced wear** with optimum engine speed
- **Fuel savings** up to 10%
- **Avoids unfavorable ranges**
- **Automatic idling speed** if there are no boom movements and the pump is off

## Ergonic<sup>®</sup> radio remote – everything under control

In addition to enabling boom control, the radio remote control allows the operator to monitor and set parameters. The machine operator has access to live feedback and system information, such as engine speed, fluid temperature, concrete pressure, output, and pressure and volume limit.

If a situation arises in which the radio remote control cannot be used, the standard cable remote control can be used as a replacement.

- **Up-to-date feedback and system information readily available** on the radio remote control display
- **Easy operation of the entire display** using buttons and a rotary selection knob



## SIMPLE OPERATION

Easy and intuitive, for all machine operators.

## RELIABLE OPERATION

With a comprehensive fault management.

## DETAILED FAULT MANAGEMENT

Comprehensive fault messages with suggested solutions.

## Ergonic<sup>®</sup> Graphic Display (EGD) – a transparent overview

The operator can view all relevant machine data and adjust individual parameters on the Ergonic Graphic Display (EGD). Live feedback and system information for the machine appear in real time. The display is easy to operate using buttons and a rotary selection knob. These buttons take you from the main menu to the individual sub-menus:

### Pump status

- Pumping animation in real time
- Pumping data including hydraulic pressure, stroke time, and engine speed

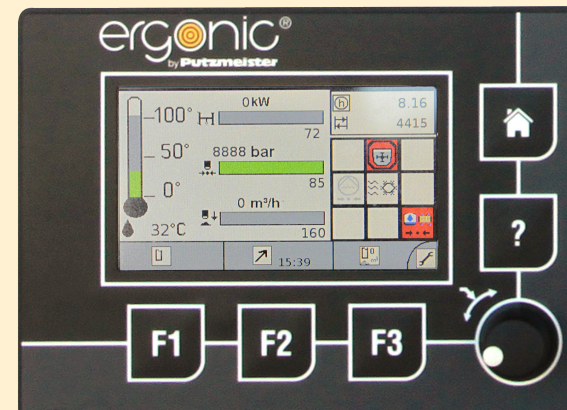
### Machine status

- Sensor monitoring like engine speed, transfer tube, magnetic switch, agitator, etc.\*

### Pump settings

- Switching EOC on and off
- Limiting the delivery pressure and rate
- Adjusting the fan and Push Over, etc.

The individual symbols, limit values, and maximum values are selected in the submenus using the rotary selection knob, and confirmed by pressing the knob.



\* Sensors that are not relevant for safety can be deselected temporarily, and the machine will continue to work in emergency operation.

# You can rely on Putzmeister – service, parts, and training

## Everything that sets service apart

Putzmeister provides first class service with swift assistance, meaningful advice, and a reliable supply of genuine Putzmeister parts and accessories in over 120 countries.

### Ideally placed to support you

We continuously train our service technicians, provide a close-knit information network, and the latest equipment to consistently strive to meet our customers' needs.

Our employees have all the relevant technical information about your machine at their fingertips, allowing us to provide you with the best possible support for emergencies, repairs, or preventive maintenance.



## Our services for cost-effective work

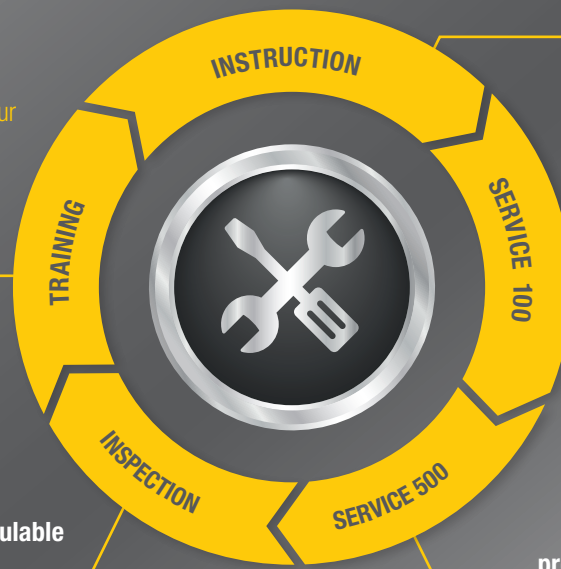
The Putzmeister service support points offer you these services - all provided by our experienced service staff:

### Customer training – benefit from expert knowledge

Practice-oriented learning offers many benefits: Master the machine and all of its special features, use the machine to optimum effect, reduce operating costs, and avoid operating errors.

### Mandatory machine inspection – calculable costs instead of incalculable failures

Visual inspection and functional check of components for 100% safety. The hydraulic system with cylinders, electrical system, and core pump are also inspected.



### Introduction at handover – everything correct from the get-go

You and your team can adapt perfectly to all features and innovations.

### 100 hours of customer service – avoid potential sources of error

Receive a status report on your concrete pump per the Putzmeister service plan.

### 500 hours of customer service – protect your investment, retain your value

Our technical customer service team is the number one choice for checking the safety and wear of your machine.





## Putzmeister Academy - Service Schools

We want to make sure you get the most from your Putzmeister equipment. To maximize the use and profitability of your investment, take advantage of the regular training seminars at our Wisconsin headquarters.

Service Schools cover maintenance, operation, and inspection of boom pumps, Teelbelts, and Thom-Katts. They include hands-on training, problem-solving exercises, hands-on presentations, and safety training.



## Genuine parts for maximum availability

We use only genuine Putzmeister parts in our workshops to guarantee consistent quality. You can be sure that your machine meets the tough requirements with maximum performance and availability.

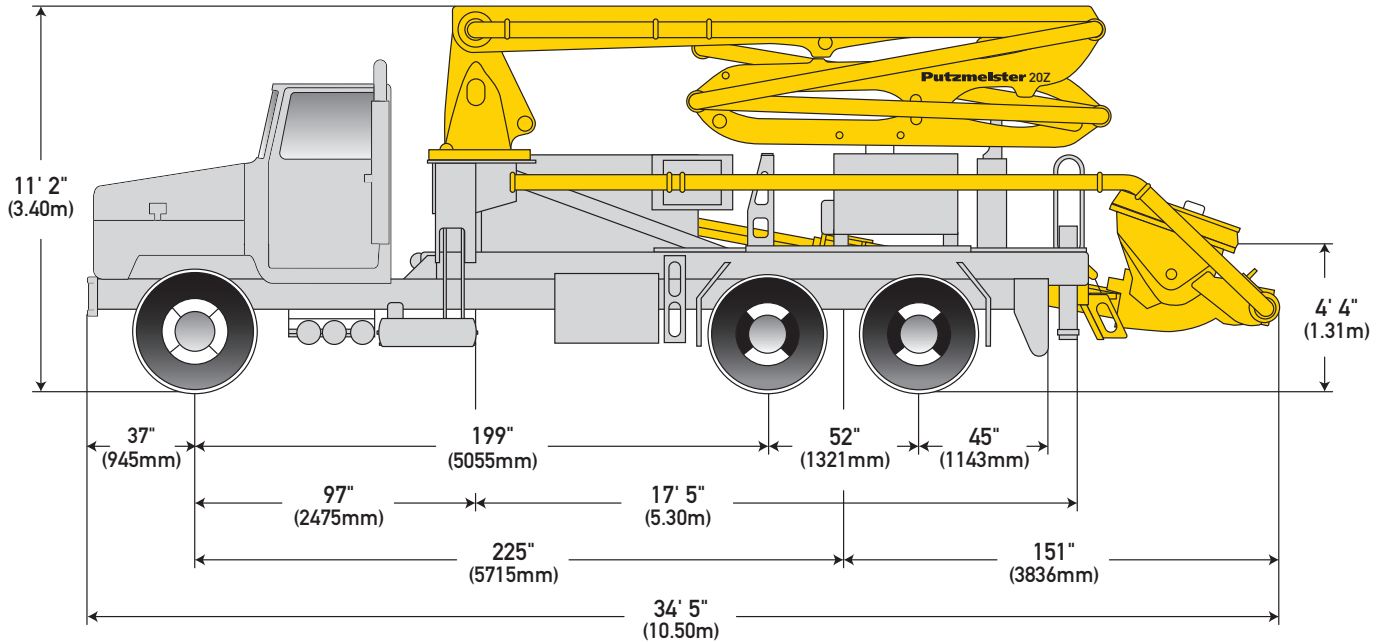
- Immediate availability worldwide through our extensive dealer network
- Longest possible service life and maximum reliability
- Minimal maintenance and repair work thanks to high-quality materials and tested quality
- Quick and easy replacement with precise fitting and no variations in quality
- Safety for your customers, your personnel, and your investment

## Product and training information — whenever, wherever

We consistently provide the most up-to-date product and training information through our YouTube channel. From the comfort of your own home to on the jobsite, you have access to hundreds of videos that showcase the latest and greatest Putzmeister products, how-to videos, demonstrations, and much more.



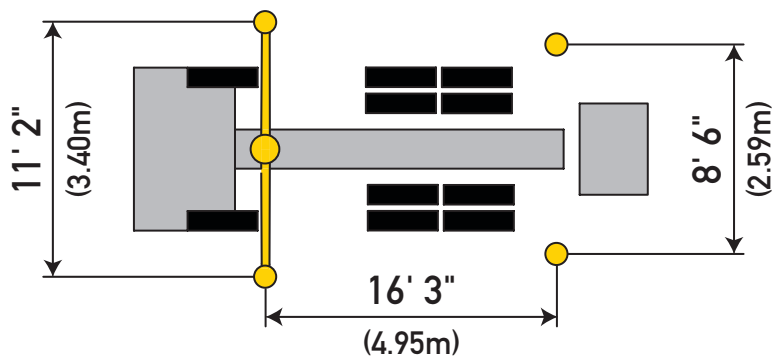
# 20Z-Meter Truck-Mounted Specifications

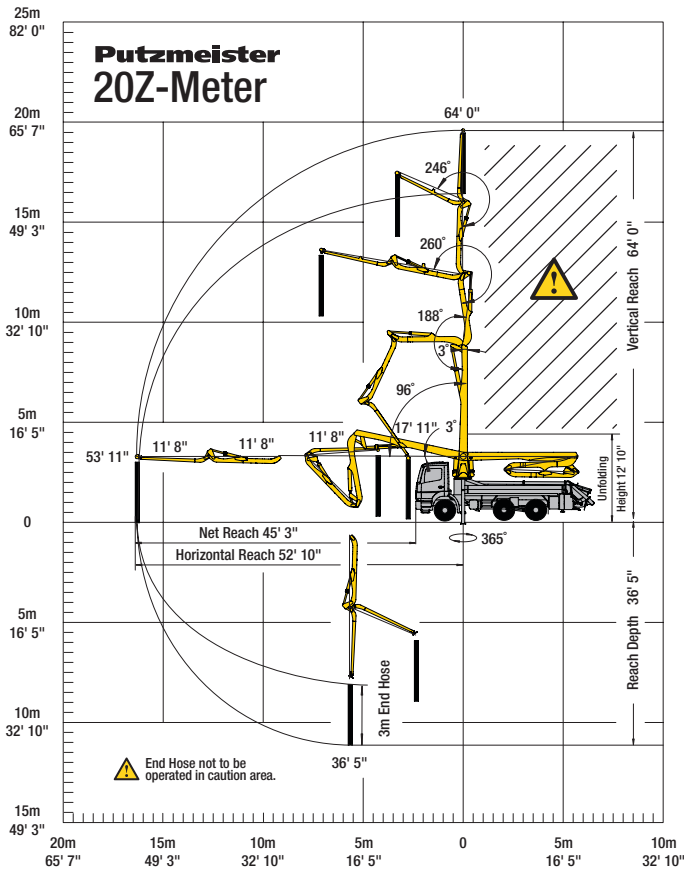


Machine Dimensions	Imperial	Metric
Length	34' 5"	10.50 m
Width	8' 2"	2.50 m
Height	11' 2"	3.40 m
Outrigger spread L - R — front hydraulically extended out & down	11' 2"	3.40 m
Outrigger spread L - R — rear hydraulically swing out & extend down	8' 6"	2.59 m
Wheelbase	225"	5,715 mm

Weight	Imperial	Metric
Front axle weight	10,764 lbs	4,882 kg
Rear axle weight	27,240 lbs	12,356 kg
Approximate total weight	38,004 lbs	17,239 kg

Based on Model Kenworth T300 with .12H pump cell. Dimensions will vary with different truck makes, models, and specifications. Weights are approximate and include pump, boom, truck, driver and full fuel tank. Varies with options selected.





Boom   Multi-Z Design	Imperial	Metric
<b>Height &amp; Reach</b>		
Vertical reach	64' 0"	19.50 m
Horizontal reach	52' 10"	16.10 m
Reach from front of truck*	45' 3"	13.80 m
Reach depth	36' 5"	11.10 m
Unfolding height	12' 10"	3.90 m

4-Section Boom		
1st section articulation	96°	
2nd section articulation	188°	
3rd section articulation	260°	
4th section articulation	246°	

1st section length	17' 11"	5.46 m
2nd section length	11' 8"	3.56 m
3rd section length	11' 8"	3.56 m
4th section length	11' 8"	3.56 m

General Specifications	Imperial	Metric
Pipeline Size (ID) metric ends	5"	125 mm
Rotation	365°	
End hose — length	10' 0"	3.00 m
End hose — diameter	5"	125 mm

Pump	20Z.12 H	
	Imperial	Metric
Output — rod side	145 yd <sup>3</sup> /hr	111 m <sup>3</sup> /hr
— piston side	98 yd <sup>3</sup> /hr	75 m <sup>3</sup> /hr
Pressure — rod side	1,233 psi	85 bar
— piston side	1,934 psi •	133 bar •
Material cylinder diameter	9"	230 mm
Stroke length	83"	2,100 mm
Maximum strokes per minute		
— rod side		21
— piston side		14
Volume control		0-Full
Vibrator		Standard
Hard-chromed material cylinders		Standard
Hydraulic system		Free Flow
Hydraulic system pressure	5,075 psi	350 bar
Differential cylinder diameter	5.5"	140 mm
Rod diameter	3.1"	80 mm
Maximum size aggregate	2.5"	63 mm
Water tank — pedestal	172 gal	650 L

Maximum theoretical values listed. \* Applies to units mounted on PMA stock truck. • Standard delivery line system rated at max line pressure of 1,233 psi (85 bar)

# Here for you every step of the way

## Our Putzmeister Promise

We build machines that increase your production and give you a competitive edge – and these machines are continuously developed. Innovative technologies and durable quality need to adapt to your ever-changing daily challenges. Our products stand for optimum output with low fuel consumption, wear, and costs.

Our customers will always have a thinking, intelligent partner in all their undertakings; a partner that will deliver to their exact requirements regardless of the complexity of the task or the remoteness of the scale. With knowledge and understanding backed by experience, we approach every task with renewed enthusiasm – be it a small scale construction or a mass assignment, tight deadlines, or unique concreting and manufacturing needs.

## Your Putzmeister Team



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