









# 20Z Truck-Mounted Boom Pump

Technical specifications

# Compact machinery for large undertakings

#### Unimpeded deployment in the smallest possible space

This small pump excels in the most confined spaces. With the low unfolding height of under 13 feet, the 20Z is perfect for pumping concrete in the most restrictive jobsites: halls, under bridges, underpasses, or multi-story 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.

#### The smallest footprint

Only the 20Z can offer such a support area: 3.81 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.



#### 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



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.

# intelligent Setup Assistant (iSA) and Full Flex — a revolutionary advantage



## Infinitely variable support with Full Flex

Any front leg position between zero and full support can be utilized with the Full Flex base structure's infinitely variable support, allowing you to operate your machine in the most restrictive jobsites. Setup is as intuitive and straightforward as ever: the machine operator adjusts the legs depending on the space available – the machine calculates the rest. Clearly structured data in real time, intuitive operation, and a radio remote control make setting up quick and easy.

# iSA — Our most supportive system ever

Putzmeister is revolutionizing concrete pump set-up assistance with the new iSA (intelligent Setup Assistant). The successor to the proven OSS system offers a significant improvement to machine reach and flexibility, is equipped with an unprecedented reach simulation feature, and is kept simple by allowing the operator to turn iSA on and off with a single switch.



#### Two machines in one

#### 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
- Front & rear hydraulic outriggers
- Snap-locks for outriggers & bubble level indicators
- 406 psi (28 bar) high pressure water pump
- 185 gal (700L) composite 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 3.0 w/ Ergonic Output Control (EOC)
- Standard world pattern
- Radio remote w/ Ergonic Graphic Display Remote Control (EGD-RC) w/ full proportionality & 20m cable back-up option
- Ergonic Graphic Display in control cabinet
- 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

#### 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 a 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.

#### **Features**

- Hinged splash quard
- 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

#### 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 Squeeze valve air line installation

High pressure washer (2000 psi / 138 bar) Squeeze valve installation w/ PM EQV part

Oil tank heater Wash-out hose reel kit

Partial Flow Filter / Dehydrator Water tank heater

# iLS pump – highlights

The Putzmeister iLS pump generation is setting standards across the board

The heart of every truck-mounted concrete pump is the pump itself. The iLS pump generation delivers significantly improved data across the board and is the logical advancement of the tried and proven HLS generation.

Hopper

The hopper has a user-friendly and low-

protected, the grill is welded, and the

maintenance ergonomic design. It is RFID

hopper cover can be locked in 4 positions.

#### Special features

- Fuel savings of up to 25%
- 3% increased efficiency with leak prevention
- 10% better suction resulting from the elimination of constrictions in the concrete flow
- Optimized drive unit
- Optimized conveying unit ideal for the heaviest concretes
- Reduced wear for long service life
- Optimized accessibility for maintenance and service
- Automatic stroke correction without pump interruption
- Field-tested and robust

**Lubrication system**The grease cycles have

protect all concrete

bearings from wear.

been adapted to better

Reduced noise

#### Concrete cylinder

Eliminating the constriction before the S transfer tube has resulted in calmer pump behavior and improved efficiency. On longer sections, the reduction from 250 mm to 180 mm occurs only in the S transfer tube.

#### **Drive cylinder**

Hydraulic circuits further relieved through automatic stroke compensation and the elimination of pressure peaks in the end bearings.

Seals

Designed for maximum reliability for outstanding system performance.

#### S transfer tube

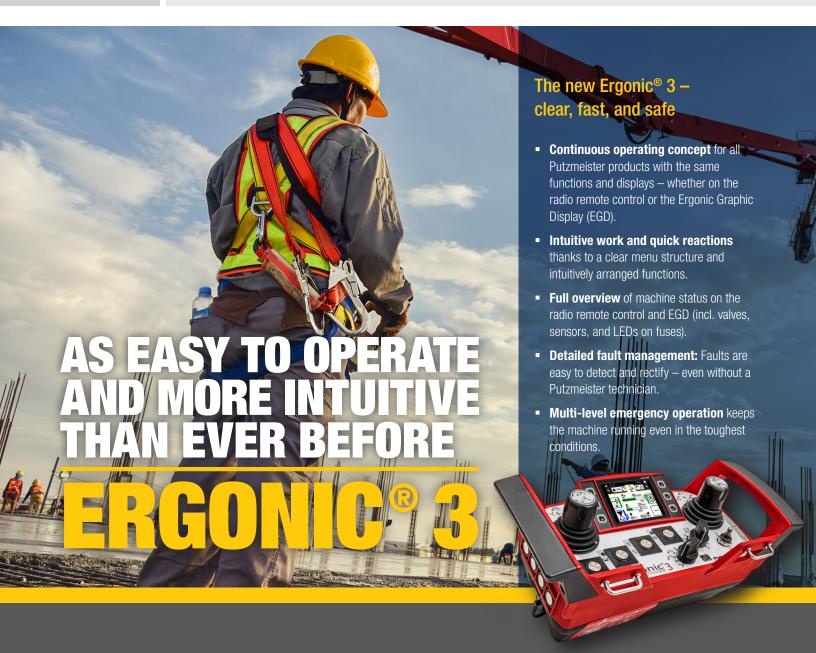
The hardened valve operates smoothly and guarantees extreme durability.

## S transfer tube swivel bearing

The hopper wall thickness and bearing surface lave been doubled for maximum reliability.

LONGER SERVICE LIFE LOW MAINTENANCE OPTIMIZED EFFICIENCY OPTIMIZED ACCESSIBILITY EASY CLEANING BEST PERFORMANCE!

## Ergonic® 3 – highlights



#### **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 microprocessorsupported control systems regulate the functions of concrete pumps and placing booms.

#### Always by your side - Ergonic® 3 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.



#### The best of two worlds

Ergonic® 3 is the logical evolution of Ergonic® 1 and Ergonic® 2.

Proven features are maintained, others developed further, and new and future-oriented functions are integrated.

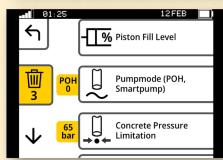
- Experienced Putzmeister customers quickly become familiar with operation, making the switch incredibly easy.
- New customers will need little training or instructions since operation is so intuitive.
- Once learned, a wide variety of machine models can be operated.

## Keeping an overview in every situation

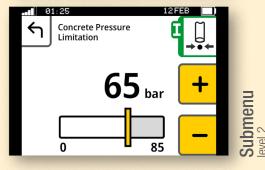
- The static menu bar guides users through the available functions.
- Neatly and intuitively arranged functions.
- Simple menu structure with a maximum of two submenu levels.
- Main menu with all standard functions and additional details in submenus.



Main men



ubmenu



#### 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.

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

INSTRUCTION

SERVICE 500

TRAINING

NSPECTION

# 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 ou 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, Telebelts, and Thom-Katts. They include hands-on training, problem-solving exercises, hands-on presentations, and safety training.



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## Product and training information — whenever, wherever

We consistantly provide the most up-todate 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.

# Genuine parts for maximum availability

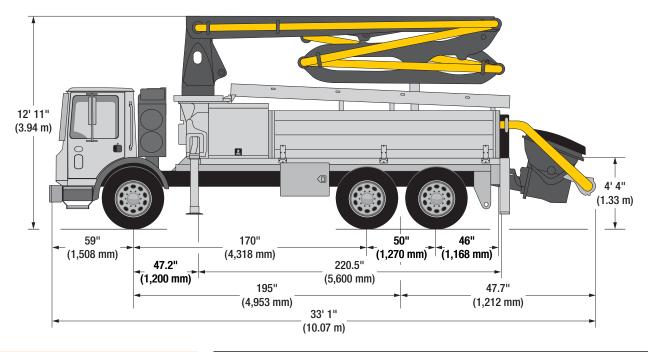
We use only genuine Putzmeister parts in our workshops to guarantee consistent quality. You can be sure that your machine meets the tough requirements with maximum performance and availability.

- 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



# 20Z-Meter Truck-Mounted Specifications

Machine Dimensions		
	Imperial	Metric
Length	33' 1"	10.07 m
Width	8' 2"	2.50 m
Height	12' 11"	3.94 m
Wheelbase	195"	4,953 mm



Based on Model BSF20-4.16H MACK 64R 6x4/195.

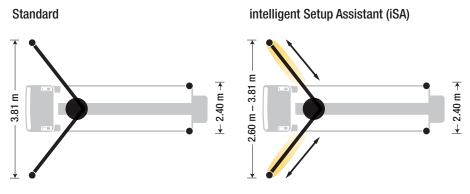
Dimensions will vary with different truck makes, models, and specifications.

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

Maximum theoretical pump values listed.

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

Outrigger Spreads		
	Imperial	Metric
Front — L - R I hydraulically extended out & down	12' 6"	3.81 m
Rear — L - R I lift cylinders extend down	7' 11"	2.40 m



Weight		
	Imperial	Metric
Front axle weight	16,022 lbs	7,268 kg
Rear axle weight	26,731 lbs	12,125 kg
Approximate total weight	42,754 lbs	19,393 kg

Boom				Range Diagram
Z-Roll-folding Design	Imperial	Metric		
Height & Reach			0.5	
Vertical reach	65' 0"	19.80 m	35	
Horizontal reach	53' 6"	16.30 m	30	
Reach from front of truck*	44' 11"	13.70 m	30	
Reach depth	34' 1"	10.40 m	25	
Unfolding height	12' 10"	3.90 m	25	
			20	W/////st
4-Section Boom				245°  180°  Do not use as working area  180°  as working area
1 <sup>st</sup> section articulation	90°		15	245°
2 <sup>nd</sup> section articulation	180°			180° Do not use
3 <sup>rd</sup> section articulation	260°		10	as working $\frac{260^{\circ}}{8}$
4 <sup>th</sup> section articulation	245°			area #
			5	3.6 m 3.6 m 3.6 m 5.5 m
1st section length	18' 1"	5.50 m		9 m signal in the state of the
2 <sup>nd</sup> section length	11' 10"	3.60 m	0	Net horizontal
3 <sup>rd</sup> section length	11' 10"	3.60 m		reach 13.7 m
4 <sup>th</sup> section length	11' 10"	3.60 m	5	Gross horizontal reach 16.3 m End hose 3 m
			10	reach 16.3 m End hose 3 m
General Specifications			10	Tiella llose 3 III
	Imperial	Metric	15	btt de la contraction de la co
Pipeline Size (ID) metric ends	5"	125 mm	10	De
Rotation	365°		20	
End hose — length	10' 0"	3.00 m	20	
End hose — diameter	5"	125 mm	25	
			30	25 20 15 10 5 0 5 10

Pump			20Z.16 H		20Z.17 iLS
		Imperial	Metric	Imperial	Metric
Output	Rod side	209 yd³/hr	160 m³/hr	_	_
	Piston side	141 yd³/hr	108 m³/hr	222 yd <sup>3</sup> /hr	170 m³/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"	230 mm	10"	250 mm
Stroke length		83"	2,100 mm	83"	2,100 mm
Maximum strokes	Rod side		31		_
per minute	Piston side		21		28
Volume control			0-Full		0-Full
Vibrator			Standard		Standard
Hard-chromed ma	aterial cylinders		Standard		Standard
Hydraulic system			Free Flow		Free Flow
Hydraulic system	pressure	5,075 psi	350 bar	6,092 psi	420 bar
Differential cylind	er diameter	5.5"	140 mm	4.5"	115 mm
Rod diameter		3.1"	80 mm	3.1"	80 mm
Maximum size ag	gregate	2.5"	63 mm	2.5"	63 mm
Water tank — pe	destal	185 gal	700 L	185 gal	700 L

# 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 everchanging 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** 





Canada's Exclusive **Putzmeister** Dealer

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