



# Truck-mounted concrete pump M56

First-class investment for ambitious targets

## Size and strength at its best

Dutema

**M** Putzmeister

Immense reach with manageable dimensions

To create great things, you need adequate resources for the implementation. For challenging projects in building and underground construction, the decision in favour of a M56 therefore comes easy. Because the vertical reach of up to 56 m offers lots of radius and the proven high-performance pumps from Putzmeister provide ample output.

### **Putzmeister Promise**

The name Putzmeister stands for machines that you can work with extremely productively and more than just competitively. For this purpose, we provide you with exceptionally innovative technologies as well as maximum quality and an excellent service. We support you with total commitment around the globe and around the clock. For every Putzmeister employee is aware of the fact that important tasks lie ahead for your machine.

#### Your Putzmeister Team

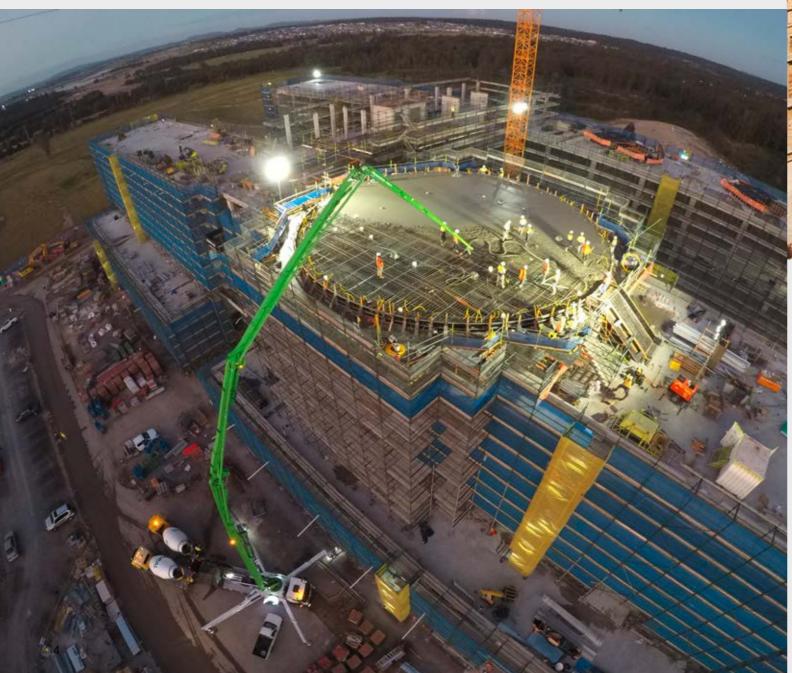
### The M56 in profile

#### Generous in terms of radius

Up to 56 m vertical reach can be fully utilized by the 5-arm boom in roll Z-folding. Whether in halls, under bridges or in multistorey buildings – this machine does a good job everywhere.

#### **Space-saving when supporting** The M56 is fitted with the TRDI support

system developed by Putzmeister. The telescopic support legs can be securely placed in very small spaces.





#### **Excellent handling**

Thanks to elaborate ergonomics, the very good responsiveness of the boom control and place-saving support, the machine is pleasantly easy to operate.

#### Exemplary in terms of safety

The broad consideration of all current standards and guidelines offers an outstandingly high level of safety. Thus, you always drive and work on the safe side.

#### Economic in terms of time and costs

The optimised accessibility saves working time and thus money. The many maintenance-free components also ensure reduced costs. This means that this truck-mounted concrete pump will pay off in a very short time and works with moderate operating costs throughout the entire service life.

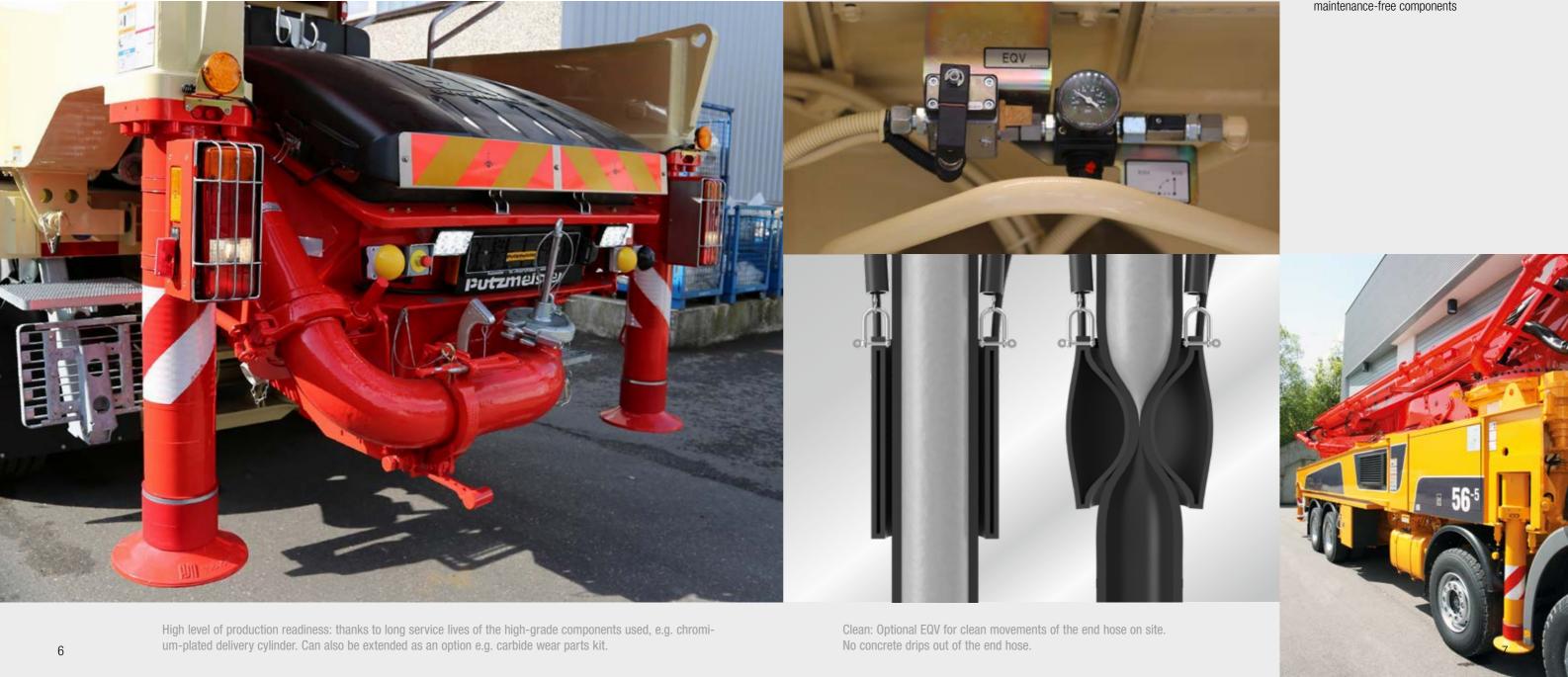
### Great technology in action

As versatile as your requirements – M56

High reach, low support dimensions and a compact design are the best requirements to convince in daily operation. Additionally, our concrete pumps provide plenty of performance for efficient work, and with their coordinated geometry, are suitable for all common types of concrete. Depending on the country-specific licensing regulations, you will receive the M56 on 4 or 5 axles.



Collapsible steps, ideal protection against damage



### Benefits are best demonstrated in the application

- **Smooth 5-arm placing boom** thanks to intelligent laying of the delivery line and the balanced development of the steel structure
- Efficient work through consistently clever ergonomic design
- Maximum safety thanks to closer consideration of current standards and guidelines
- Service-friendly as a result of optimised accessibility
- Minimum service costs thanks to maintenance-free components

### Putzmeister quality work in detail

Our well thought-out concepts save you costs

How does it work? We develop solutions in the team that you can work with economically, safely and in an environmentally friendly manner. For example, the application of main-tenance-free components, the automatic safety system iSC, the central grease lubrication system ...

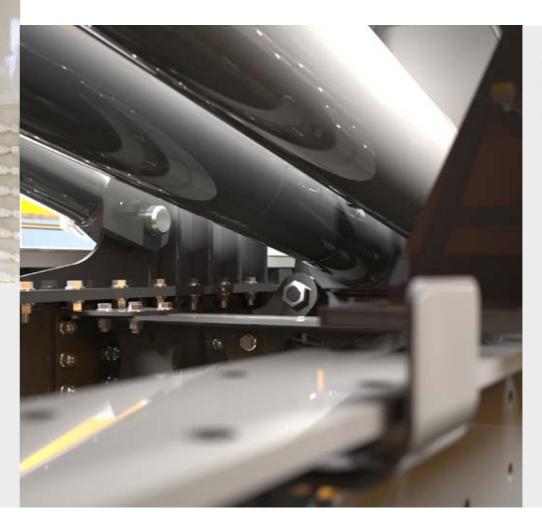


Innovation and quality only succeed with employees who think in a customer-oriented and future-oriented manner.





Maintenance-free components allow your operating and maintenance costs to be pleasantly low. For example, by wear-optimized 45° delivery line bends with long collars in every quality type for maximum service life of the delivery line.





Safety system iSC: The EN 12001:2012 requires absolute control over the interaction between support, boom and pump. iSC (Intelligent Setup Control) allows you to work flexibly according to the standard.

Piston pumps with free flow hydraulics: In the closed loop the oil reaches the drive cylinder from the pump with minimal losses – for more power and considerably less oil consumption.

> High-output concrete pumps: Thanks to their coordinated geometry they are designed for all common types of concrete. Thus, more power is transferred and resources are saved.

## Long-lasting performance stroke for stroke

#### Pump, drive, control geared to performance

Our concrete pumps have an optimally coordinated geometry for all common types of concrete. The long-lasting S-tube switch and the closed loop of the free flow hydraulics contribute significantly to high performance with minimum resource consumption. Just like the computer-based control EPS (Ergonic<sup>®</sup> Pump System).

#### EPS (Ergonic<sup>®</sup> Pump System) control system

EPS provides fully electronic regulation of the operation of the concrete pump, the motor and the placing boom. For you, that means:

- High machine availability thanks to high-quality components with low wear
- Optimized, smooth pumping process
- Reduced movement of the machine and boom
- With (Ergonic<sup>®</sup> Output Control), ideal motor speed for lowest consumption, wear and noise
- New EPS Plus (optional) offers three predefined hose pump programmes
- In addition, the agitator function can be automated (optional), depending on the pump control
- Fault management via EGD-RC (Ergonic<sup>®</sup> Graphic Display-Remote Control)

#### The S-tube keeps even rough mixes flowing

- The S-tube switch works smoothly and fast even with stiff, wear-intensive and coarse-grained mixes
- Long service life and service intervals, high machine availability
- Prolongation of the service life by the welding of a wear layer
- Easy replacement of the slide valve
- Optimized switching and less vibrations on the machine and boom

#### You choose the power

The M56 is available with different pumps with a delivery pressure of 85 bar: The 16H with two chromiumplated delivery cylinders (dia. 230 mm), which is cheaper in comparison, and the smoother 16HLS resp. 17iLS/19iLS (dia. 250 mm). They offer a delivery rate of up to 190 m<sup>3</sup>/h, but the LS version has a lower number of strokes and is thus subjected to less wear.

#### The enhanced 17iLS/19iLS also offer numerous benefits and improvements:

- Fuel saving of up to 25 % with EOC 2.0 (field tested with multiple pumps for international applications)
- More efficient pumping: Oil leaks prevented by improved sealing system
- Better pump start-up behaviour
- Longer service life thanks to robust S-tube bearing



#### Pumps

Туре	Output m³/h	Pressure bar	Stroke mm	Cylinder Ø S mm	Strokes/min
16 H	160*	85	2100	230	31
16 H LS 1	160*	85	2100	250	26
17 i LS	170*	85	2100	250	27
19 i LS	190*	85	2100	250	30

All data represent theoretical maximum values.

\* Rod/piston side. Max. delivery rates and max. delivery pressures cannot be operated at the same time. not for FFA



#### The pump at a glance

- Pump geometry is optimally adapted to all common types of concrete
- Service-friendly control system with free flow hydraulics and thus consistently high hydraulic fluid quality
- Particularly wear-resistant S transfer tube design, which guarantees long service life
- **Optimized hopper** (screwed-in grille, improved shape and optimized S transfer tube storage)
- Agitator safety shutdown via RFID (Radio Frequency Identification), a detection system using electromagnetic waves, including start-up protection
- **Smooth, optimized pumping** with EPS and EOC protects the pump and the truck
- **Optimized switchover** with SN control and Push Over avoids wear-intensive pressure peaks
- Convenient and simple operation with Ergonic® 3 the latest concept for control hardware and software from Putzmeister
- Minimum operating costs thanks to maintenance-free components, good accessibility and significantly reduced volumes of fluid
- **Easy replacement of components** due to screw concept, e.g. support cylinder
- Optional agitator automatic system, whereby the direction of rotation corresponds to the pump direction
- Chrome-plated delivery cylinder particularly wear-resistant

## Ergonic<sup>®</sup> 3 – precise, intuitive and reliable!

Dedication in every respect

Ergonic® inside means that the machines are quickly ready for use and they work with high power, fuel efficiency and low wear. And most importantly for machine operators: Work becomes easy!







### The new Ergonic<sup>®</sup> 3 – clear, fast and safe

- Continuous operating concept for all Putzmeister products with the same functions and displays – whether on the radio remote control or the Ergonic Graphic Display (EGD).
- Intuitive work and quick reactions thanks to a clear menu structure and intuitively arranged functions.
- Full overview of machine status on the radio remote control and EGD (incl. valves, sensors, LEDs on fuses).
- Detailed fault management: Faults are easy to detect and rectify - even without a Putzmeister technician.
- Multi-level emergency operation keeps the machine running even in the toughest conditions and in virtually every case.

Keeping an overview in every situation

- The "static" menu bar guides users through the menu – with no chance of "getting lost".
- 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.

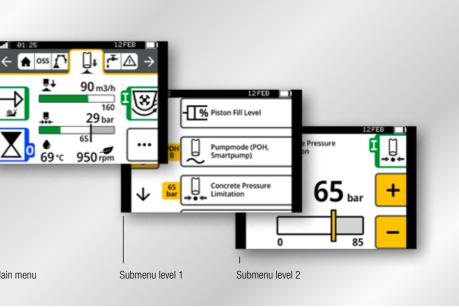
Main menu



The additional screen on the control cabinet uses the same concept and offers a variety of information, settings and options.



Pumping made smart If our concrete pumps form the heart of Putzmeister machines, then the Ergonic<sup>®</sup> 3 system is the brain.





### **Consistent concept** on all "switching centres"

- The menu structure is nearly identical on the remote control and the graphic display.
- Hardware and software are perfectly matched at all operating positions.
- The same intuitive operation on all Putzmeister products – without requiring a lot of training.

## iBC – intelligent Boom Control

## iSC – intelligent Setup Control

Intelligent boom control – an unrivalled dimension of convenience and precision

The performance level of a truck-mounted concrete pump is evident in how precisely, quickly and safely the boom can be moved and positioned. As a pioneer in intelligent boom control systems, Putzmeister has already demonstrated how user-friendly a concrete pump can be with the EBC.

With **iBC (intelligent Boom Control)**, this system is now improved again – setting new standards for convenience and precision.



#### Extremely precise boom movements – iBC (intelligent Boom Control)

#### Unrivalled convenience

The patented iBC control system makes it easy for machine operators to control the boom with the joystick using just one hand. As a result, the end hose can be moved forwards, backwards or diagonally at the preselected height with a great deal of precision.

#### Unrivalled precision

The latest Putzmeister development is a big hit with machine operators: iBC made it possible to improve the boom's response characteristics and precision by another 80 %. The advanced boom damping delivers a stable, steady arm assembly at high delivery rates.

#### Unrivalled ease of folding

Folding and unfolding the arm assembly has never been this easy. With iBC, the boom movements are optimised for the exact machine model. Standard movements are carried out guickly and easily.



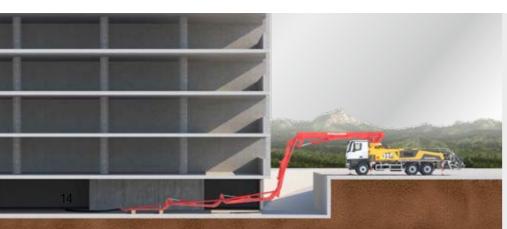




#### Increased limits thanks to FLEX base structure

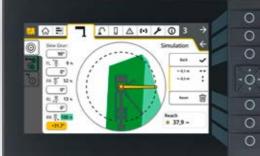
The support provided for Putzmeister concrete pumps has become more and more flexible over the past years. For the swinging support legs, it is already fully flexible and offers a variety of intermediate positions for the forward support legs. The combination of iSC and the substantially optimised steel

geometry now enables a level of flexibility not seen before. With the new Putzmeister FLEX base structures\*, supporting and setting up the machines is no easier and more flexible than ever before - and therefore incredibly straightforward for machine operators.



#### Additional safety for complex obstacles

A maximum and minimum value can be specified for every hinge position. The intelligent teach-in function transfers the limits for the uppermost hinge to all others, for example to prevent collisions with the ceiling in low buildings.



#### Our most supportive system ever – iSC (intelligent Setup Control)

With the iSC (intelligent Setup Control), Putzmeister is raising the stability of concrete pumps to a whole new level. The successor to the proven ESC system offers a significant improvement in terms of machine reach and flexibility.

#### On the safe side – now more than ever

- Maximum versatility Optimum support options to suit the space available on-site. Even in the most difficult of conditions.
- **Maximum reach** Perfect interaction the reliable reach prediction allows machine operators to utilise the robust steel structure of Putzmeister machines to their fullest potential.
- **Maximum safety** 100 % safety, no small print. Guaranteed stability in any situation. The patented drop warning and the possibility of providing additional support help machine operators in difficult conditions.



\* Gradual introduction starting at bauma 2022, depending on the market-specific configuration.

Safe support at a glance Clearly structured figures in real time, intuitive operation and a radio remote control make setting up on the construction site quick and easy.

### M56

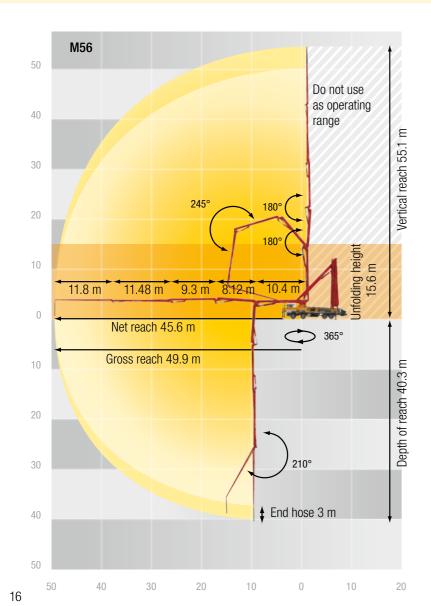
### Placing boom M56

Folding type	5-arm roll Z-folding (RZ)
Vertical reach	55.1 m
Horizontal reach	49.9 m gross
Depth of reach	40.3 m
Unfolding height	15.6 m
End hose length	3 m
Delivery lines	DN 125
Slewing circle	365°

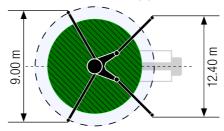
#### General

Support width	front	/ rear	
Standard	9.0 m	/ 12.4 m	
OSS	5.9 m	/ 8.3 m	
iSC	2.6 - 9.0	m / 3.0 m – 12.4 m	
<b>Overall length</b>	approx. 14.1 m		
Height	under 4.0	m	





#### Standard – Full support

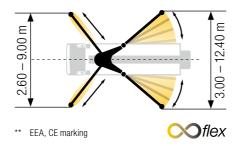


OSS\* – One-side support

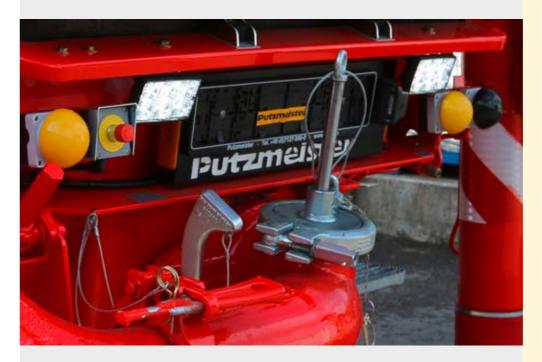


non EEA, no CE marking \*

iSC\*\* – Flexible support



Additionally, Emergency Stop on the left. The driver can react quickly, he does not have to run forward to the support foot control or run around the mixer.



Additional LED reversing light provides more safety by rear view.

### Equipment

With the Putzmeister M56 we offer you a machine which already boasts substantial equipment as standard.

With the diverse optional equipment, you can also adapt your range of services to the needs and requirements of your customers.

Ergonic <sup>®</sup> (EPS, EOC and EGD with fault management)	t ■
Hopper grease lubrication system	
Radio remote control system with dis- play and additional cable remote control	•
Rotatable 45° delivery line bend with long collars	
Spacious platform	
Ergonomic work platform	
OSS (One Side Support) or iSC (Intelligent Setup Control)	
Water tank with 800 I	
Agitator safety shutdown via RFID with start-up protection	•
Connections for emergency supply	
Chromium-plated delivery cylinder	
Vibrator can be positioned as required thanks to the screwed-in grille	
iBC (Intelligent Boom Control)	
Bypass filter for even better oil quality	
Wide range of lighting systems	
Foldable underrun protection with light- ing	
Compressor	

And much more ...

## Build on Putzmeister – in service, parts, training

#### Everything that sets service apart

Swift assistance, meaningful advice and a reliable supply of genuine Putzmeister accessories and parts – in over 120 countries worldwide. This is what we at Putzmeister understand as first-class service.

#### Ideally placed to support you

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

Thanks to state-of-the-art technology, our employees have all the relevant technical information about your machine at their fingertips, should the need arise. Allowing us to provide you with the best possible support for emergencies, repairs or preventive maintenance.



#### Genuine parts for maximum availability

It goes without saying that we use only genuine Putzmeister parts in our workshops. This is the only way to guarantee consistent guality, checked for interoperability. And you can be absolutely sure that your machine meets the tough requirements with maximum performance and availability.



benefit from expert knowledge Practice-based learning offers a host of benefits: Your employees master the machine with all its special features, use the machine to optimum effect, reduce operating costs and avoid operating errors.

### Our services for cost-effective activities

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

#### 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.



#### Excellent in quality customer proximity

In case of need, you have two options: Either the service team visits you or you take your machine to one of our service workshops. The latest tools, software analysis solutions and genuine parts ensure that your machine is operable again immediately.

All Putzmeister workshops and the workshops of our international Putzmeister partners meet our high quality standard. Especially when it comes to manufacturer's inspections and acceptance procedures in accordance with specifications.

#### Our range of training courses and seminars

#### For concrete pump machinists

- Training and development seminars Concrete pumps
- Training and development seminars PUMI with piston and rotor pumps
- Regional / company seminars (in your region or on your premises)

#### For concrete pumps mechanics

 Training and development seminars Concrete pumps

#### For concrete pump machinists and mechanics

- Practical days in Aichtal
- on-the-job training

#### For workshop managers and foremen

- Putzmeister concrete pumps
- Qualification at the customer workshops for requisite maintenance work

Further information can be found at: www.pm-akademie.de

#### Induction at handover everything correct from the outset

So you and your machinist can adapt perfectly to all special features and innovations.

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

Our customer service team provides you with a status report on your concrete pump as 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. You receive a status report for this too.

Training: Handover and induction,

## Overview of current developments in



### The M56 at a glance

- Smooth 5-arm placing boom thanks to intelligent laying of the delivery line and the balanced development of the steel structure
- Efficient work through consistently clever ergonomic design
- Maximum safety through closer consideration for current standards and guidelines
- Service-friendly as a result of its optimised accessibility and consistent bolted concept
- Minimum service costs thanks to maintenance-free components



Note: The diagrams in the brochure do not necessarily correspond to the full scope of standard equipment for the machines. Further brochures: Ergonic<sup>®</sup> 3 CT 5013



#### Putzmeister Concrete Pumps GmbH

Max-Eyth-Straße 10 · 72631 Aichtal / Germany P.O.Box 2152 · 72629 Aichtal / Germany Tel. +49 (7127) 599-0 · Fax +49 (7127) 599-520 pmw@putzmeister.com · www.putzmeister.com

