









ESC – Safe, systematic support

ESC from Putzmeister – safe, convenient, and easy to work with

ESC from Putzmeister – Easily supported

A stable basis for regulation-compliant operation

ESC (Ergonic Setup Control) is the Putzmeister safety system that is guaranteed to help you operate your truck-mounted concrete pump in line with EN 12001:2012* guidelines. We satisfy every single requirement the standard specifies!

Ensure you're protected in every respect

But that's not all ESC does. It helps operators set up and use machinery safely – even over long, strenuous working days and in cases where concentration levels are starting to flag. And this makes it a system that not only ensures a significant increase in personnel safety on the building site, but also safeguards your investment



Requirements for fulfilling the Machinery Directive/EN 12001:2012: The standard prescribes automatic control by means of the interplay between the support, boom motions and pump function. This means that a system must be used in conjunction with a safe control system in order to ensure that the safety-related functions of a mobile concrete pump are reliably monitored. This safety system must be permanently active; the user must not deactivate it

Create even more working space

Keeping you safe is not all the innovative ESC control system does, however — it also opens up a whole host of additional options for supporting your machine in a way that is both safe and space-saving. That's because ESC creates more working space than conventional systems — and in addition to our full support option, we are now offering an extensive range of machines with additional support positions for the very first time.

The permitted arm positions and working ranges are clearly defined, ensuring the concrete pump remains stable at all times during operation. This means that ESC provides a more flexible option than full support in cases where space for positioning machinery is restricted – and it still allows you to work in accordance with existing directives and standards.

during normal operation.

Example of a positioning situation with One-Side Support. The extended arm assembly can be moved within the range shown in pale yellow.

How the automatic ESC system works

- Activating the boom function initiates a check of the vehicle's inclination, preventing it from tilting over
- The control system ensures that the arm assembly can only be moved within the permitted working range
- The operator can also move the arm assembly freely within this working range during pumping
- Adjusting arm 1 to a vertical position extends the working range
- **To clean the concrete pump**, the hopper cover can be opened in the driving position without the need to extend the support system

"ESC helped me prevent an accident from happening. The system reported an error, telling me that a foot had lowered. I was then able to re-secure the pump" (reference customer)

More ways to keep you on the safe side

ESC extends your operating radius

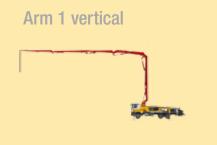
Support your machine even more compact: In addition to the full support option, ESC is now also available with new, space-saving support versions. **Extend your working range:** Positioning arm 1 vertically creates a larger swivelling range.

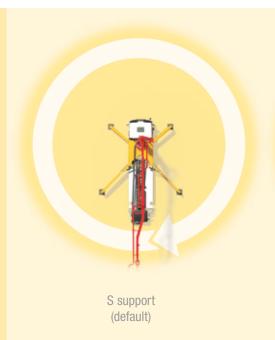
Below is an example of the wide range of options available, based on the 38-5:















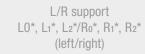






F support (front)











 * These positions can only be set in machine types equipped with the new Putzmeister Ergonic 2.0 control system



Ls/Rs support (left one side/right one side)



F support F₁*, F₂*, F₃* (front)



L/R support Lo*, L1*, L2*/R0*, R1*, R2* (left/right)







Reliable protection for people and investments



How the technology helps achieve this

- Safety-related functions take place automatically
- Stability in every position and application
- Safety functions are monitored by reliable sensors: a 2-channel sensor forrestricted working ranges and 2-channel safety control systems for additional support positions in particular
- Boom/support leg movements are interlocked with one another
- If the boom is not in the transport position, an acoustic warning signal sounds
- Even in the cleaning position, the boom is guaranteed not to move in the direction of an unsupported side
- Movable guards are secured to prevent them reinitiating

How you benefit as an operator

- Helps you assess construction situations
- Helps ensure that machinery is operated safely
- Provides evidence for refusing to work in a potentially unsafe construction situation
- Information on the safety status is displayed at the workstation (on the remote control display)

- Machinery indicates limits during pump operation
- Prevents errors from occurring in stressful situations
- Easy to switch between different machines

"This machinery helps me to tackle the kind of complex tasks that I'd never have dared to before." (reference customer)

How you benefit as an operator

- Less risk of accidents, protecting employees
- Investments are safeguarded
- State-of-the-art safety technology used to the fullest extent possible
- Compliance with applicable standard as well as equipment and product safety legislation EN 12001:2012
- Minimum risk of insurance policies being cancelled, thanks to a reduction in damage

- Machinery preserves its value; overloading and damage are prevented
- Excellent use of machine capacity as standby operators require very little training
- Reduction in costs thanks to lower liability risks, fewer repairs and lower insurance costs

It's all in how the system is used

ESC provides reliable support for machine operators setting up and using machinery on a day-to-day basis. It allows truck-mounted concrete pumps to be operated safely, even during strenuous work or when concentration levels are starting to flag. And it's easy to use — with just a little familiarisation and practice, even standby operators can begin using it without a hitch. So your employees and your truck-mounted concrete pump will get to the end of every activity — and every long working day — completely safe and sound. That's what makes ESC an invaluable investment!



Reliable support for even extreme situations

It is rare to come up against an extremely difficult support situation that the system is unable to tackle — but if this does happen, the operator has the option of switching to process monitoring mode and working on the construction site independently. ESC provides assistance in this event.

The same applies to the very unlikely event of the sensors failing. In this case too, there is no need to cease work at the site: instead, the driver can switch to process monitoring mode and continue to work using the operating instructions.

ESC at a glance

- ESC helps you to work safely while affording you maximum versatility and ease of use in line with EN 12001:2012 as well as equipment and product safety legislation
- ESC significantly increases safety on the building site – thanks to real-time stability monitoring and information provided at the operator's workstation
- ESC gives you more options thanks to flexible support, outstanding use of machine capacity, and extended working ranges
- ESC safeguards the stability of the concrete pump at all times during operation, as the working ranges determined by the support are clearly defined
- ESC means significantly improved safety on the building site – protecting operators and safeguarding investments to maximum effect
- **ESC reduces liability risks**



"It wouldn't have happened if we'd used ESC" is a phrase that we hope we'll never have to hear — and by working with you, we can make that wish come true.

If you have any questions about safety or EN 12001:2012, don't hesitate to get in touch. We will be delighted to advise you.

Putzmeister Concrete Pumps GmbH

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