

# **Safety at work with Putzmeister machines - standard features -**

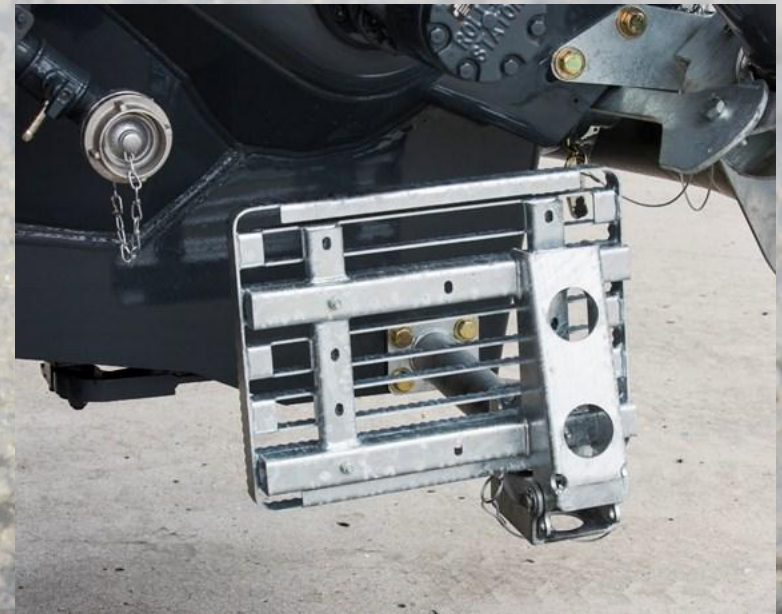
## Handrail next to the water box

- Safe step near the hopper
- Handrail right side for safe water box service



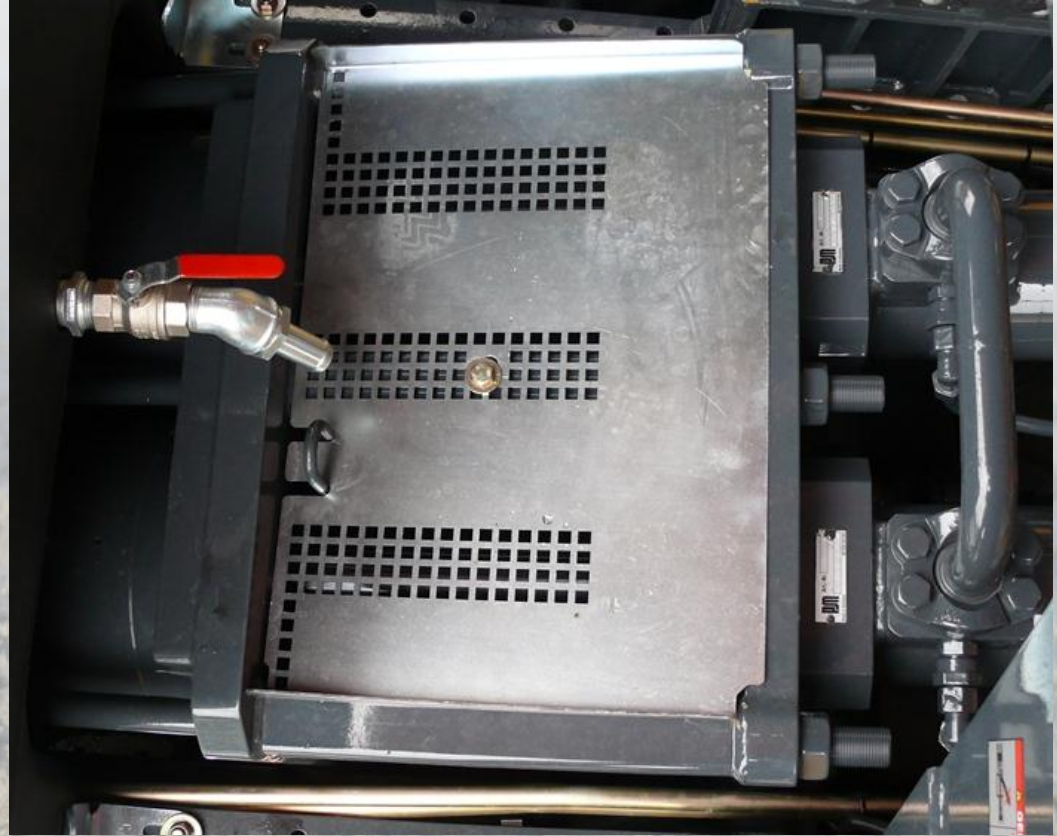
## Step for cleaning the hopper

- Best position for cleaning
- Folding
- Slip resistant



## Fixed water box cover

- Fixed and easy to remove
- Little loss of water during pumping
- Optional water box illumination
- Optional remote control for water box filling and draining



## Defined jack points at the machine

- Marked with label and color
- Labelled with maximum load in the front and in the rear
- Hooks and eyes make the attachment of lifting equipment easy



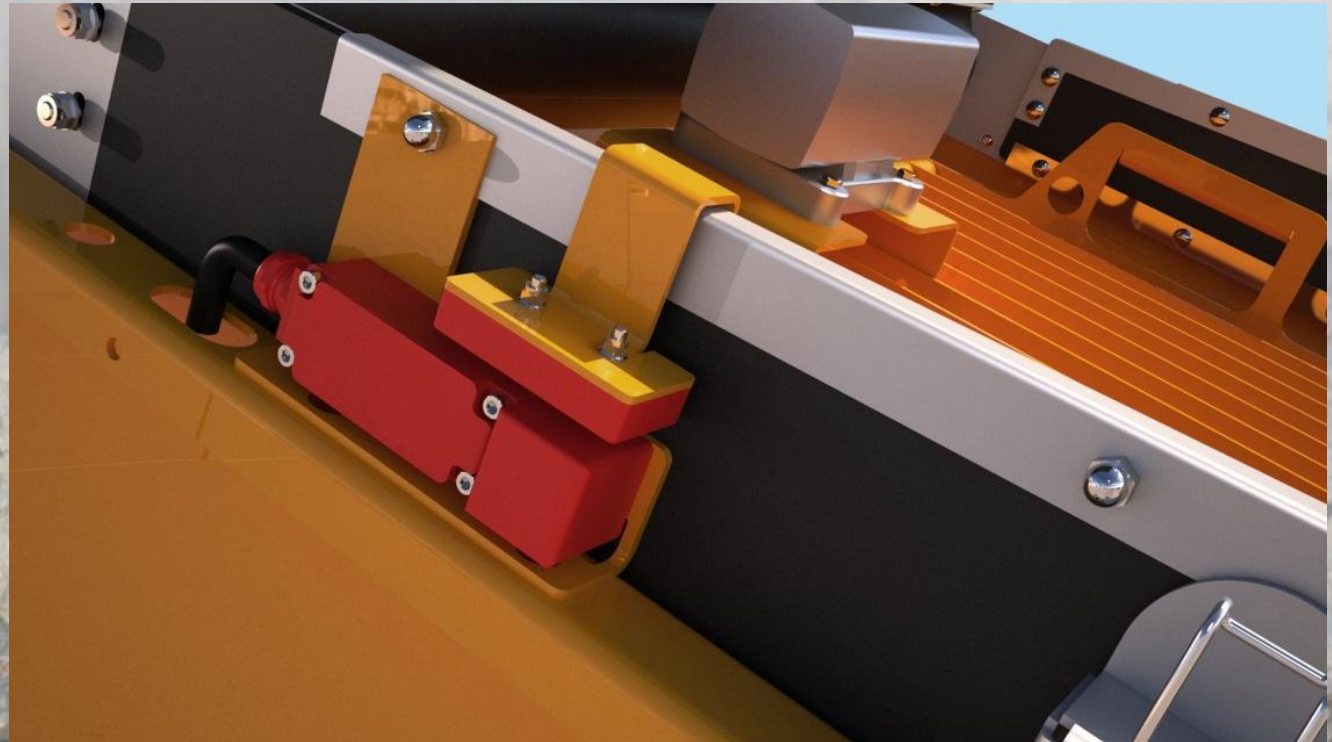
## Defined fall protection anchor points

- Label to use personal fall protection equipment
- Defined and labelled anchor points at the turret



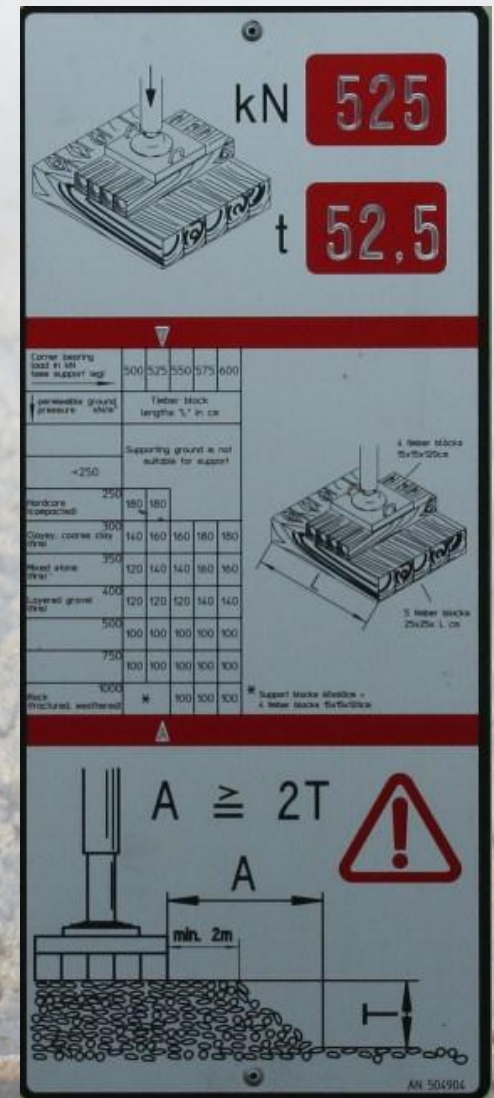
## Safety cut off at the hopper grille

- Wear free operation
- Waterproof and dirt resistant
- Indicator LEDs



## Maximum support leg force decal

- Indication of the maximum support leg force, at all permissible positions and all admissible conditions
- Example list for timber beams
- Safety information for support close to pits or dams
- Numbers engraved in aluminum plate



## Snap lock verification

- Mechanical lock
- Manual lock for driving mode
- Red mark for visual check



## Boom rest with warning device

- A warning buzzer will inform the operator in the cab when the boom is not in rest and the PTO is put in driving position
- Defined switching force at certain machines (e.g. M3X)



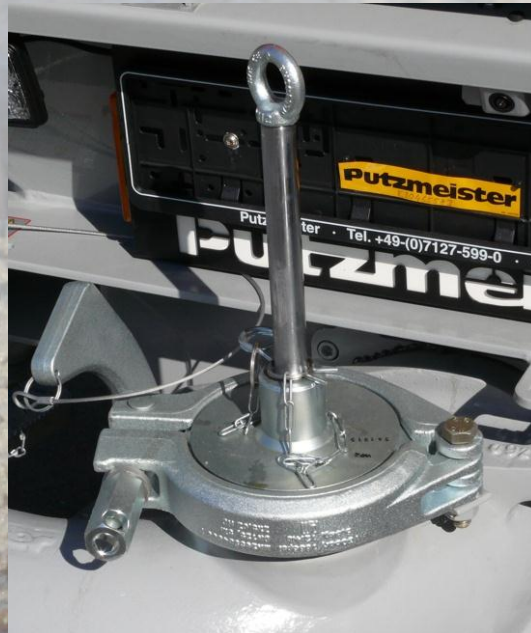
## Hopper cover

- Protection against concrete ejection when emptying the hopper by pumping



## Wash out lid with ball catcher

- Enabling the ball catcher without opening of the wash out lid
- Ball catcher is protected against loss
- Ball catcher is protected against unintentional engaging




## Boom cylinder protection

- Preventing vertical boom movement due to ruptured hydraulic hoses or lines



## Warning and information signs


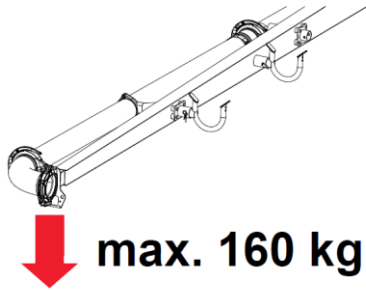


- Information signs to explain machine function
- Warning signs
- Safety signs
- Application
- All texts available in local language


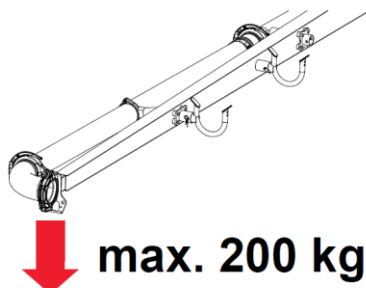


<b>⚠ DANGER</b>  <p>min. 5m</p>		<b>⚠ DANGER</b>  <p>2 x L</p> <p>L</p>		<b>⚠ DANGER</b>  <p>⚠</p>		<b>⚠ DANGER</b>  <p>⚠</p>	
<p>⚠ Ensure compliance with the minimum distance from overhead electrical power lines.</p>		<p>⚠ Ensure that the machine is supported on appropriate ground.</p>		<p>⚠ Do NOT remain in the danger zone during operation of the support legs.</p>		<p>⚠ Do NOT remain in the danger zone during operation of the support legs.</p>	
<b>⚠ WARNING</b>  <p>⚠</p>		<b>⚠ WARNING</b>  <p>⚠</p>		<b>⚠ WARNING</b>  <p>⚠</p>		<b>⚠ WARNING</b>  <p>⚠</p>	
<p>⚠ Do NOT position the end hose backwards.</p>		<p>⚠ Only move the machine with supports secured.</p>		<p>⚠ Do NOT set up the machine at an angle of more than 3°.</p>		<p>⚠ Do NOT set up the machine at an angle of more than 3°.</p>	
<b>⚠ WARNING</b>  <p>⚠</p>		<b>⚠ WARNING</b>  <p>⚠</p>		<b>⚠ WARNING</b>  <p>⚠</p>		<b>⚠ CAUTION</b>  <p>⚠</p>	
<p>⚠ Always wear suitable protective clothing.</p>		<p>⚠ Do NOT remain in the vicinity of hot or poisonous exhaust gases.</p>		<p>⚠ Do NOT remain in the vicinity of hot or poisonous exhaust gases.</p>		<p>⚠ Do NOT remain in the vicinity of hot or poisonous exhaust gases.</p>	
<b>ℹ NOTICE</b>  <p>ℹ</p>		<b>ℹ NOTICE</b>  <p>ℹ</p>		<b>ℹ NOTICE</b>  <p>ℹ</p>		<b>ℹ NOTICE</b>  <p>ℹ</p>	
<p>ℹ Follow the operating instructions.</p>		<p>ℹ Follow the operating instructions.</p>		<p>ℹ Follow the operating instructions.</p>		<p>ℹ Follow the operating instructions.</p>	
<p>ℹ Welding work on the machine only to be carried out by authorised specialists.</p>		<p>ℹ Welding work on the machine only to be carried out by authorised specialists.</p>		<p>ℹ Welding work on the machine only to be carried out by authorised specialists.</p>		<p>ℹ Welding work on the machine only to be carried out by authorised specialists.</p>	


MN 537862\_EN

## Decal for allowed gross hanging weights at the boom tip

- Putzmeister within the rules of EN12001 allows longer end hoses for wall concreting as long as the permissible gross weight including concrete is not exceeded
- Smaller end hoses could be for example up to 9m long (DN 65)
- **Attention!** Free hanging end hoses longer than 4m are not allowed to be guided by a hose man during pumping

 <b>WARNING</b>	
	 Gross weight of all add-on and conveying line parts including concrete must <b>NOT</b> exceed 160 kg at masthead! 
<small>MN 564662_EN</small>	

 <b>WARNING</b>	
	 Gross weight of all add-on and conveying line parts including concrete must <b>NOT</b> exceed 200 kg at masthead! 
<small>MN 564687_EN</small>	



# Additional safety with optional accessories

# Additional safety options

## Optional illumination

- Illumination kits available for  
Machine  
Boom  
Hopper



## Remote control holder with warning signal

- Warning signal when „PTO“ is switched in driving mode and the remote storage compartment is empty
- Safe storage of the remote control
- Avoids expensive replacement units because of loss or damage to the remote control



# Additional safety options

## 360° camera

- Cameras on all sides of the machine
- Complete overview of the surroundings of the machine
- Screen changes automatically when driving backwards or setting a turn signal



# Additional safety options

## Folding rear underrun protection

- „truck mixer safe“ place for the tail lights
- protection against damage during pumping
- Lockable in both positions
- Availability depends on the country of destination



## Working platform

- Perfect for machine cleaning
- Considerable reduction of accident risk (machine cleaning is a hazard hot spot)
- Folding handrail enables hopper filling with two truck mixers
- Safe steps
- Safe stand
- Availability depends on machine type



# Additional safety options

## Swing out step

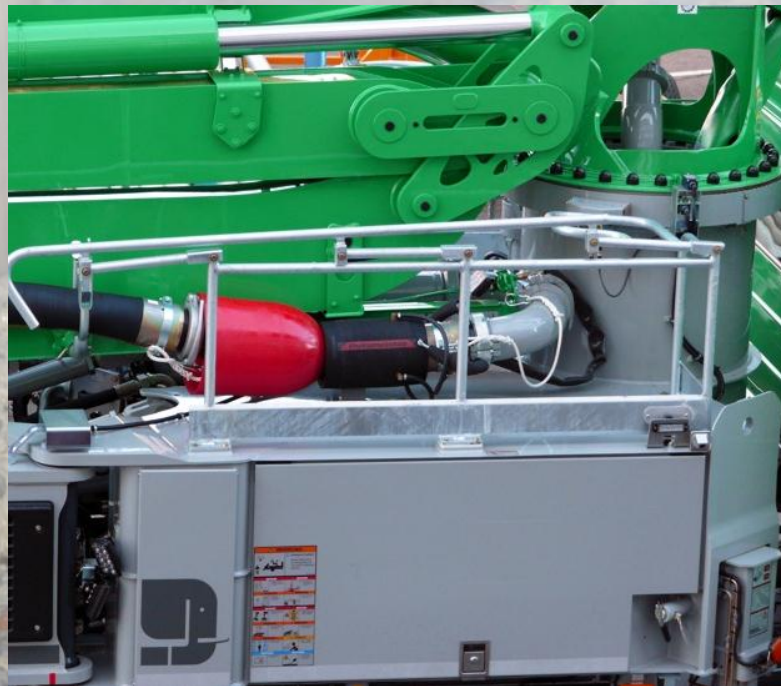
- Left step is swiveling
- Locks in both end positions also in swiveled out position
- Perfect for service and hose stowage



# Additional safety options

## Pedestal hand rail

- Double beam hand rail at the pedestal
- Fixed in lower position and middle beam height
- Upper handrail retractable to keep low unfolding height for the boom



## Protector for separate end hose connection

- Hose man protection in case of blockages and inadvertent movement
- Enables hose extensions without removing EQV
- Easy change from end hose to delivery line hose



# Additional safety options

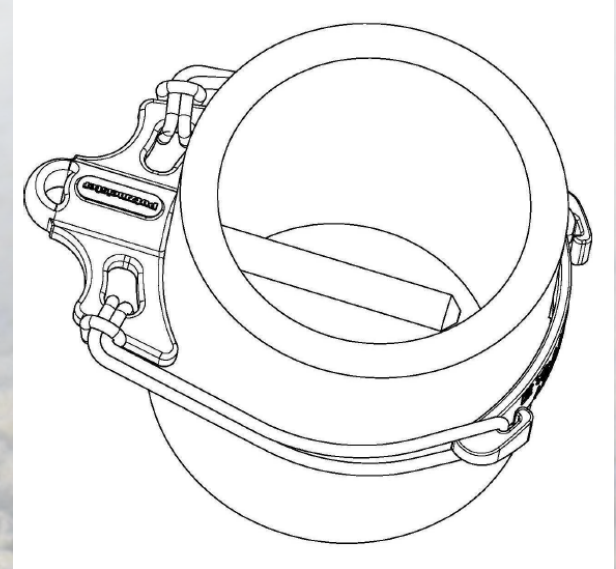
## Fill level controlled pumping with indicator

- Stops the pump before concrete sprays out
- Pump restart is enabled when the upper sensor is again reached by concrete
- Large optical indicator visible for the operator from a distance



## Proven End hose-accessory

- Excalibur prevents spraying concrete at the end hose
- Ideal at low volume or liquid concrete pumping
- Reduces danger of eye injury for the jobsite staff
- End hose hole closed by attached silicon cover during pumping without Excalibur
- Concrete pump manufacturer approval required



# Additional safety options

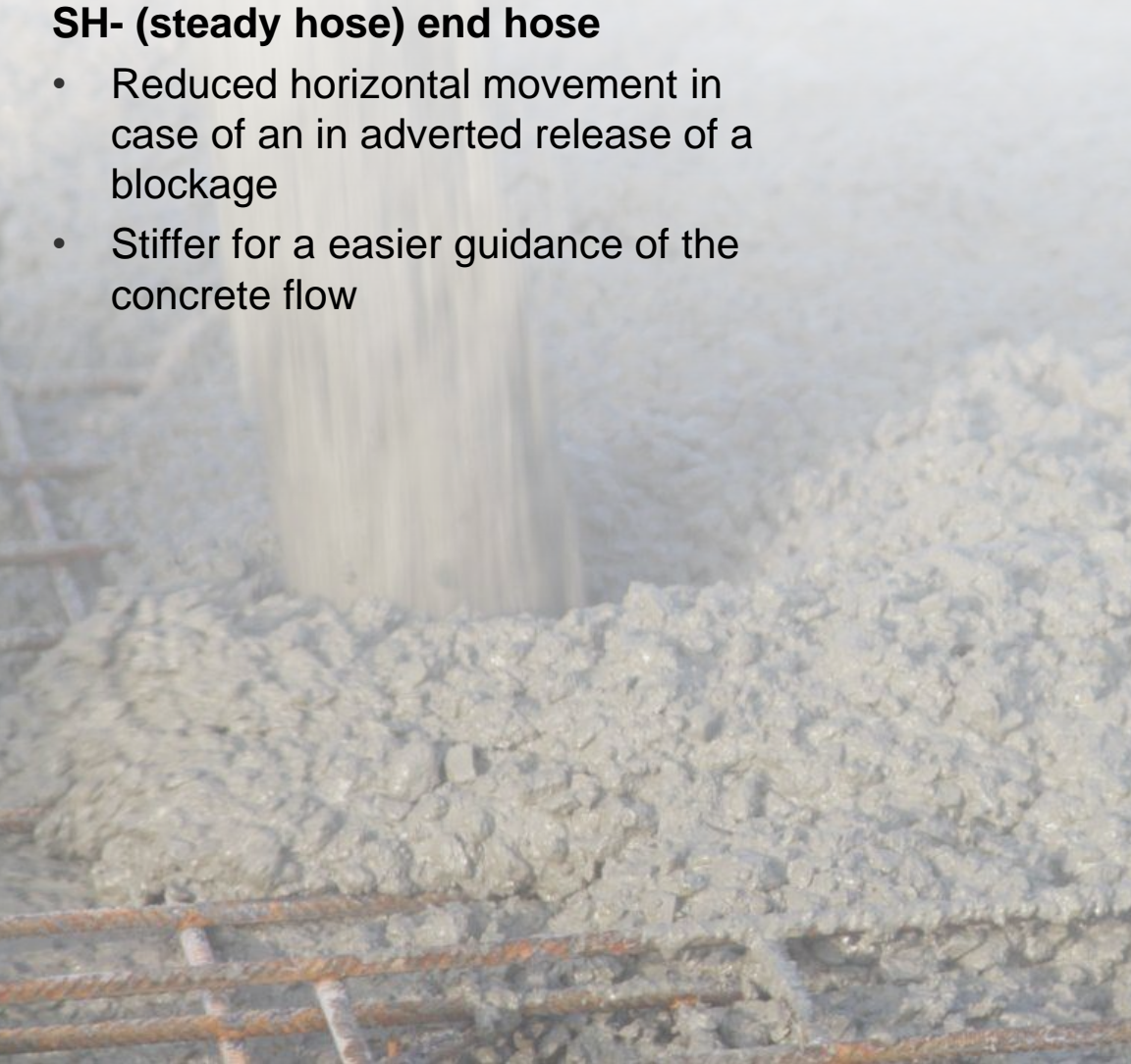
## Spray container


- Safe pressurized sprayer
- Ideal for distribution of release agents preventing the concrete from adhering to the hopper area
- Less waste or fogging compared to using truck air without pressure reducer



## SH- (steady hose) end hose

- Reduced horizontal movement in case of an inadvertent release of a blockage
- Stiffer for a easier guidance of the concrete flow





# Safety through preventative maintenance

## Re-inspection of the machine

- standard in all CE countries
- Mandatory request by manufacturers worldwide
- Competent and regular carried out by Putzmeister service staff
- An immediate repair is often possible, if the re-inspection was done at a Putzmeister service station
- Inexpensive repair of small damages can prevent a big crack of load bearing parts
- Visual check of all safety relevant machine parts



## Delivery hose test

- Regular pressure test with water
- Tremendous reduction of blowing out hoses on the jobsite
- Prevents physical injuries and high liability cases
- Up to now the duty of inspection is regulated without precise instructions
- Putzmeister checks and documents with a sticker





**Thank you  
for your attention**