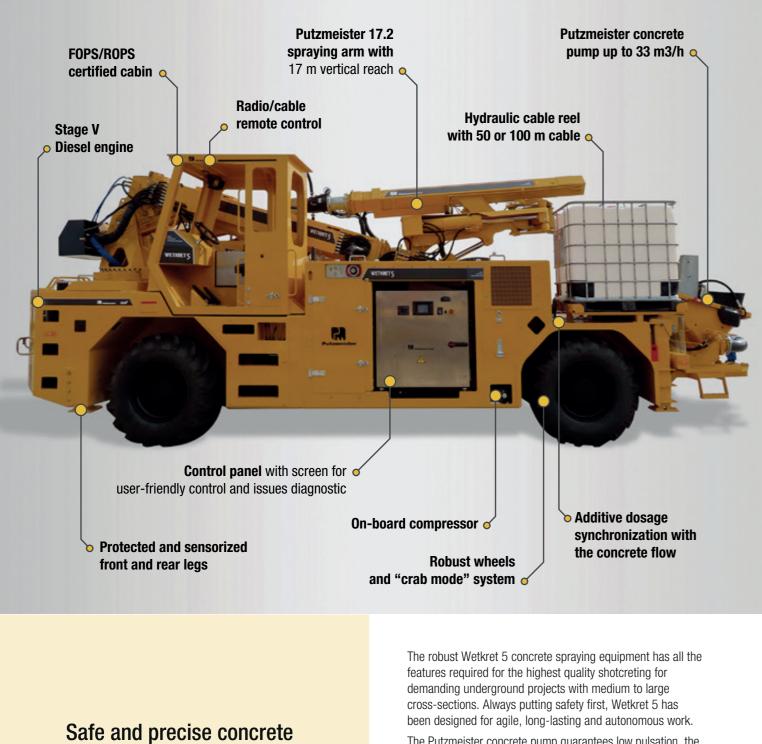




# Wetkret 5 – efficient technology for concrete spraying



The Putzmeister concrete pump guarantees low pulsation, the additive synchronization with the concrete flow is very precise, the remote control spraying arm can be moved easily to adapt to the cross-sections and control with intuitive software allows adjustments to be made to the mix and the troubleshooting of errors and alarms. In addition, with the built-in cleaning and compressor system, including the optional Hydroscaling system, no external components are required for applying the concrete.

spraying in medium and

large tunnel sections

and galleries



## Wetkret 5 – tailored to your needs and the toughest working conditions

### Flexible and precise handling: fast and robust spraying arm

With its articulated and telescopic design, the spraying arm can be deployed in a minimum section and provides a vertical spraying reach of 17 m.

The automatic spray lance movement and nozzle oscillation facilitate the operators work, so that he can concentrate on spraying finish quality, increasing productivity and efficiency.

The anti-stick system of the telescopic arm extends the life of the components and facilitates cleaning.

#### Guaranteed safety: all controls available in remote control

All the machine functions are available in the dual remote control (wireless or cable) as well as spraying arm movements: automatic spraying sequence start and stop functions (air, concrete and additive), regulation of concrete output, adjustments to the predefined additive dosage and hydraulic cable reel operation, facilitating the operators work and increasing safety.





#### Intuitive control with Putzmeister Wetkret software

The control software for Putzmeister concrete spraying machines is programmed for intuitive operation by the operator. As with other equipment in the Putzmeister Wetkret range, for easy recognition and usability for customers using more than one model, operators can adjust admixture timing and output volume, view real-time pumping data, get alerts and carry out troubleshooting on a full-colour screen in several languages.

### Environmentally friendly: power with low emissions

The powerful 129 kW diesel engine meets the latest EU Stage V emission standards. The engine has reduced nitrogen oxide emissions, allowing it to operate in protected areas.

All of the equipment's lighting: work and driving lights, beacons, etc. are LED to guaranteeing optimum lighting with low energy consumption. Optionally, Wetkret 5 can be configured with biodegradable hydraulic oil for the entire circuit.

#### Chasis Putzmeister chassis: safe design to harsh underground conditions

The chassis is designed to operate safely in harsh underground working conditions, as well as to allow preventive maintenance to be performed with a minimum of effort, as the main access points are arranged at the foot of the machine.

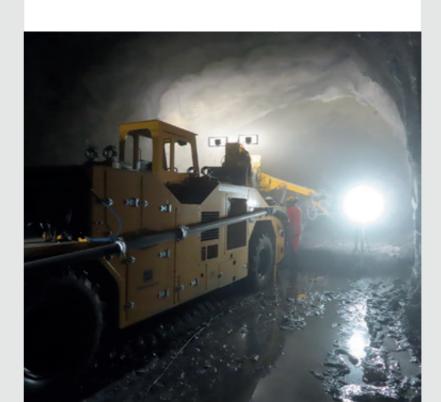
The Wetkret 5 has optimum ground clearance, allowing it to move agilely over uneven terrain. The steering system has a "crab mode" that increases manoeuvrability in these difficult driving conditions and thanks to its hydrostatic transmission with variable hydraulic motor, it is possible to change gear on flat surfaces and ascend gradients of up to 30%.

The main components, such as the axles and wheels, are highly robust and durable, always considering the toughest conditions that can be encountered on this type of construction site.

It has 2 front and 2 rear legs to stabilise the machine on any type of terrain before proceeding with the operation, all of which are protected against possible impacts and are fitted with movement sensors for safety, to warn of unexpected or incorrect movements.

The double braking system ensures safety in the event of an emergency. A brake release system is also fitted to allow the equipment to be towed if necessary.

The driver's cab is FOPS/ROPS certified and has a control panel and monitor for the rear, front and side cameras, ensuring perfect visibility.





#### Putzmeister concrete pump: low pulsation up to 33 m3/h

Putzmeister has been world famous as the manufacturer of concrete pumps par excellence for over 60 years. Putzmeister is synonymous with top quality, innovation and reliability.

Specially designed for concrete spraying, the concrete pump mounted on the equipment guarantees low pulsation and high performance. Furthermore, it is equipped with an emergency control with both diesel and electric mode.

#### Precision spraying: automatic additive synchronization timing with the concrete flow.

Wetkret 5 is equipped with a dosing system which automatically synchronizes the accelerator dosage with the concrete flow.

The screw additive pump is controlled electronically by closed circuit. It is equipped with a flow meter that provides actual, instantaneous measurement readings independently of the system wear, ensuring high quality shotcrete.

## Total autonomy: on board compressor and cleaning system

The Wetkret 5 series comes with an electric screw compressor built into the chassis, which makes it highly mobile and allows it to work autonomously without the need for external compressors. Its flow rate of up to 11.1 m3/min allows efficient and high-quality adjustment of the spraying process.

The cleaning system, which is vital for the correct maintenance of the equipment, consists of a 200 l water tank, a 140 bar high-pressure water pump and an electric or diesel drive with a spray gun. The system is also designed for cleaning the additive pump by allowing it to aspire water instead of admixture.

## Wetkret 5 complete solution for shotcreting in tunnels

#### **Optional Hydroscaling System:** improves spraying according to EFNARC recommendations

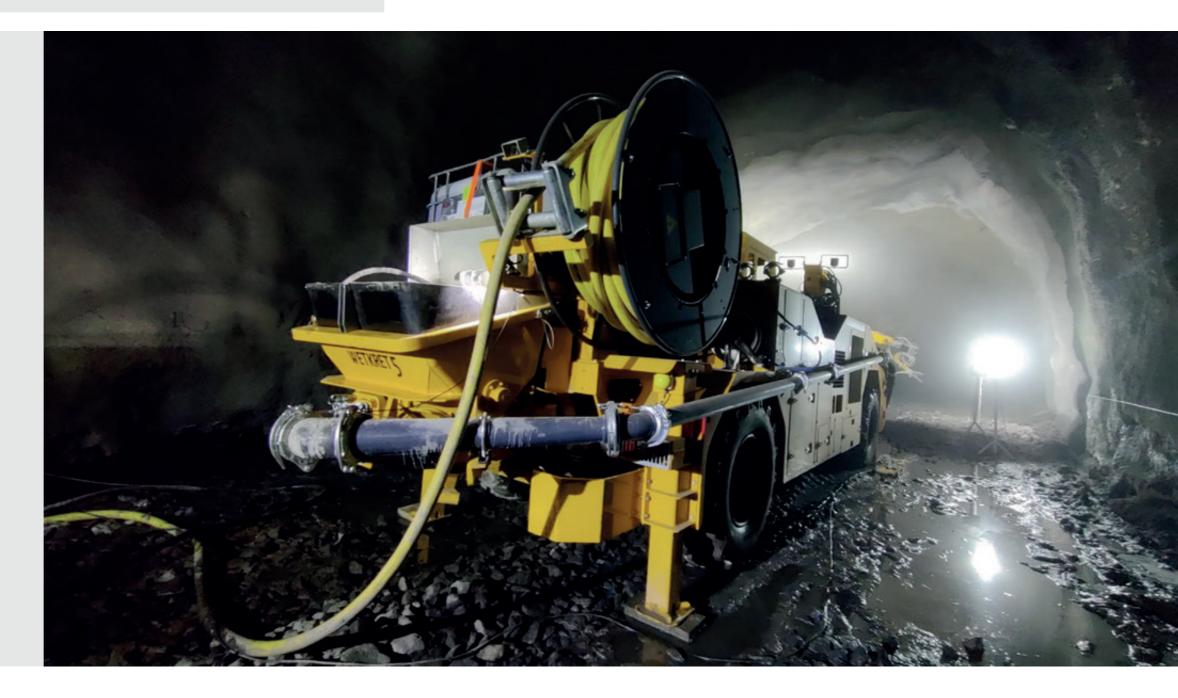
Hydroscaling systems are mainly used for two reasons: to clean the surface to be sprayed prior to application and to improve curing of the surface to prevent cracking and loss of compressive strength, both of which are recommended by EFNARC.

This process involves the use of pressurised water if permitted by terrain conditions. It leads to gains in safety by removing more unstable material or debris, improves the quality of the environment by reducing the dust generated during spraying and, above all, facilitates the subsequent adhesion of the concrete to the surface.

As an option, Wetkret 5 can be fitted with a full Hydroscaling system consisting of a high-pressure water pump and a spray lance at the end of the concrete output spraying arm, all of which is also controlled from the remote control. Therefore, this process can be performed using the same equipment that will subsequently spray the concrete, saving time on project logistics and therefore shortening the work cycle.



**Optional Hydroscaling system** for surface cleaning





Built-in cleaning system with diesel and electric operation



Hopper with agitator, electric vibrator and RFID security system on the grille. Pumping of steel or polymer fibres. Easy and safety to open for maintenance and cleaning.



Putzmeister large diameter and long-stroke concrete pump that minimises pulsations and extends the useful life of wear parts



Dual radio and cable remote control for easy and precise management of arm movements



multilingual colour display. Allows adjustment of aaditive dosage, indicates the concrete flow rate and troubleshoots errors

Highly intuitive control software via a



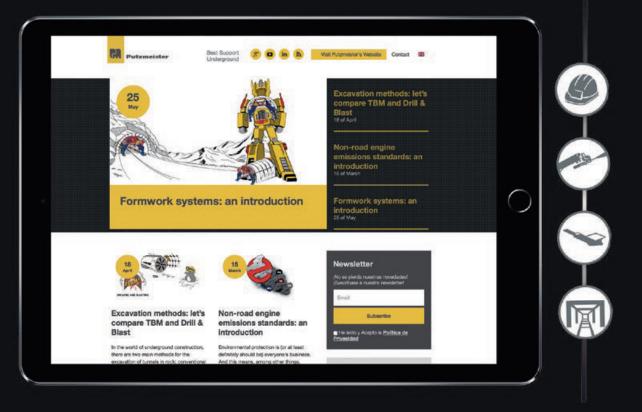
Screw additive pump with flowmeter to ensure a high-quality finish

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