

CONCRETE SPRAYING



SPM 500 WETKRET

Thanks to its long spraying reach, the SPM 500 WETKRET concrete spraying system is ideal for shotcreting medium and large tunnels, caverns and slopes. With its optimal ground clearance, the carrier is suitable for steep slopes.

AVAILABLE AS DIESEL DRIVE VERSION



SPM 5314 WETKRET ROADSTER

SPM 5314 WETKRET ROADSTER is the versatile and flexible solution for medium to large sections of tunnels, caverns and slopes. Designed to be mounted on a 2 or 3 axle truck, the equipment provides a high degree of mobility.

AVAILABLE AS DIESEL DRIVE VERSION



SPM 4210 WETKRET

With heavy-duty axles and a reinforced turning system, the SPM 4210 WETKRET is ideal for the rough working conditions in mining. The dual, proportional remote control allows an easy control of the spraying arm movements.

AVAILABLE AS DUAL DRIVE VERSION



WETKRET 3

Designed for shotcreting in small tunnel sections with difficult access, is mounted on a compact crawler chassis with support legs and an optional +/-30° tilting system.

CONCRETE TRANSPORT



MIXKRET 5 MIXKRET 4

The low-profile concrete mixer line (4 or 5 m³) for mining provides great climbing and driving capacity. With the option of an additive discharging system, MIXKRET is the perfect complement for the concrete spraying process in mining.



BATCHKRET 20

The batching plant has been designed for the challenging operating environment of the mine, allows the production of concrete on site underground, combining a compact profile with a high concrete production volume.

PUTZMEISTER CONCRETE SPRAYING TECHNOLOGY

Spraying arms specially designed by Putzmeister for concrete spraying provide the operator with the best operability and highest degree of ergonomics. The heart of the equipment is a Putzmeister concrete

synchronization of additive and concrete flow, guaranteeing a homogeneous, high-quality shotcrete mixture. An ideal mix-ratio of shotcrete and additives reduces the rebound and thus enhances productivity. Specially designed for the rough working conditions in mining and



Hydropower projects



Tunnel lining



Slope stabilization



Rock-support in mining

pump of superior quality - no other brand has pumped the same amount of m³ of concrete worldwide. With its large diameter and long stroke, pulsations are minimized and the lifetime of the wear parts increased. The additive dosing of the concrete spraying equipment allows the

tunnelling, the carriers of the equipment are extremely robust and durable. In order to provide the best possible configuration according to the working environment, the machine is completed by a range of optional equipment in accordance with customers' requirements.

EFFICIENCY AND RELIABILITY PROVEN AT MINING AND TUNNELLING JOB-SITES WORLDWIDE

PUTZMEISTER COMPLEMENTOS PARA SHOTCRETE

In addition to its concrete spraying range, Putzmeister offers low-profile concrete transporting equipment and batching plant for underground mining operations, designed and developed to complement the concrete spraying process.

Mixkret powerful engines provide great driving power, and the ICVD drive system (Integrated Continuously Variable Drive) it is possible to drive through the entire speed range without interrupting the

tractive force, increasing comfort for the driver and reducing fuel consumption.



Concrete transport and mixing

The plant has a compact footprint, combined with an elevated production capacity of up

to 20 m³/h. It can be configured with three different feeding systems, including a big bag, silo or bag cutter, optimizing the logistics of underground mining.

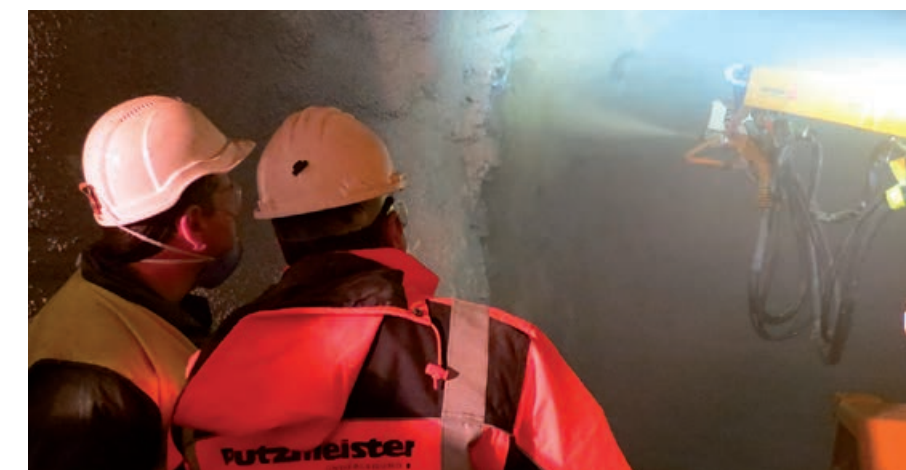
FULLY INTEGRATED SOLUTIONS FOR SHOTCRETE APPLICATION IN UNDERGROUND MINES

SPARE PARTS & AFTER SALES SERVICE

Putzmeister is committed to a fast response to every customers' need, be it spare parts, technical assistance or training. Our backoffice technicians are at your disposal to provide a remote solution to technical problems over the phone, saving costs and time. For emergencies, Putzmeister offers a 24-hour / 7 days technical service hotline, available to all customers worldwide requiring troubleshooting or technical assistance. A qualified technician is available to provide telephone assistance and support 24 hours a day / 7 days a week / 365 days per year. With an extensive worldwide network of after-sales service technicians, Putzmeister quickly responds

if assistance is required on the jobsite. The qualified staff of our subsidiary or partner located closest to you provides you with a fast and reliable service. Putzmeister's worldwide warehouses guarantee the availability of spare parts at the moment they are needed.

TECHNICAL HELPLINE FOR EMERGENCIES. TELEPHONE ASSISTANCE AND SUPPORT 24-HOURS A DAY / 7 DAYS A WEEK +34 91 428 81 00



TRAINING

In order to train your staff to use shotcreting equipment more efficiently, Putzmeister technicians are certified as 'Nozzlemen' by the European Federation for Specialist Construction Chemicals and Concrete Systems (EFNARC). Our qualified technicians provide your operators and maintenance staff with the required knowledge and skills, on site or at our premises, to increase the productivity and working life of your concrete spraying and transport equipment.

EFNARC CERTIFIED PUTZMEISTER STAFF TO TRAIN YOUR OPERATORS AND TECHNICIANS



CONCRETE SPRAYING



DIMENSIONS	
Length	7.800 mm
Width	2.400 mm
Height	3.000 mm
Turning radius: outer / inner	6.370 / 2.628 mm

SPRAYING ARM	
Max. spraying reach:	
Vertical / horizontal	17 / 15 m
Min. working section:	
Vertical / horizontal	3 / 2,8 m

CONCRETE PUMP	
Pump	Double-piston, hydraulic drive
Output (theor.)	4 – 30 m³/h
Max. pressure	75 bar

ADDITIVE PUMP	
Adjustment range	30 - 700 l/h
Additive tank	1.000 l
SYNCHRONIZED WITH CONCRETE PUMPING	

VEHICLE	
Chassis	Off-road, rigid
Engine	Diesel, 4 cylinders, 70 kW
Max. speed	20 km/h
Climbing ability	35 %

COMPRESSOR (OPTIONAL)	
Power	Electric or Diesel
Performance	75 or 70 kW
Max. air flow	11 m³/ min
Max. working pressure	7,5 or 7 bar



DIMENSIONS	
Length	9.400 mm
Width	2.480 mm
Height	3.950 mm
Turning radius:	According to truck

SPRAYING ARM	
Max. spraying reach:	
Vertical / horizontal	14 / 14 m
Min. working section:	
Vertical / horizontal	4,5 / 7 m

CONCRETE PUMP	
Pump	Double-piston, hydraulic drive
Output (theor.)	4 – 30 m³/h
Max. pressure	60 bar

ADDITIVE PUMP	
Adjustment range	30 - 700 l/h
Additive tank	1.000 l
SYNCHRONIZED WITH CONCRETE PUMPING	

VEHICLE	
Not included	

COMPRESSOR (OPTIONAL)	
Power	Electric
Performance	63 kW
Max. air flow	10 m³/ min
Max. working pressure	7,5 bar



DIMENSIONS	
Length	7.100 mm
Width	2.000 mm
Height	2.500 mm
Turning radius: outer / inner	6.650 / 3.950 mm

SPRAYING ARM	
Max. spraying reach:	
Vertical / horizontal	10 / 8 m
Min. working section:	
Vertical / horizontal	2,5 / 2,4 m

CONCRETE PUMP	
Pump	Double-piston, hydraulic drive
Output (theor.)	4 – 20 m³/h
Max. pressure	65 bar

ADDITIVE PUMP	
Adjustment range	60 - 500 l/h
Additive tank	400 l
SYNCHRONIZED WITH CONCRETE PUMPING	

VEHICLE	
Chassis	Off-road, articulated
Engine	Turbo Diesel, 4 cylinders, 55 kW or 72 kW
Max. speed	20 km/h
Climbing ability	35 %

COMPRESSOR (OPTIONAL)	
Power	Electric or Diesel
Performance	37 or 55 kW
Max. air flow	6,8 m³/ min
Max. working pressure	7,5 or 7 bar



DIMENSIONS	
Length	4.425 mm
Width	1.870 mm
Height	2.292 mm

SPRAYING ARM	
Max. spraying reach:	
Vertical / horizontal	8,79 / 7 m
Min. working section:	
Vertical / horizontal	2,5 / 2,4 m

SPM 715 SYNCHRO (OPTIONAL)

CONCRETE PUMP	
Tipo	2- cylinder, hydraulically driven
Output (theor.)	4 - 18,2 m³/h
Max. pressure	68 bar

ADDITIVE PUMP	
Adjustment range	60 - 500 l/h
Additive tank	180 l
SYNCHRONIZED WITH CONCRETE PUMPING	

VEHICLE	
Chassis	Crawler, with support legs
Engine	Diesel, 3 cylinders, 17,9 kW
Max. speed	5 km/h

PLATFORM TILTING SYSTEM (OPCIONAL)

PLATFORM TILTING SYSTEM (OPCIONAL)	
Drive	Hydraulic
Slope	+/- 30°
Rear blade - tipy stabilizer	Hydraulic

PRODUCT RANGE

Putzmeister offers the right equipment for concrete spraying work in underground mines and all kinds of tunnel constructions. Our concrete spraying equipment applies shotcrete in mines and tunnels all over the world, with spraying reaches of up to 17m and output rates of up to 30 m³/h.

The main components of Putzmeister concrete spraying equipment, spraying arm, concrete pump, chassis and control software are designed, developed and produced in-house in order to offer perfectly synchronized equipment, tailored to our customers' needs and the toughest working conditions.

The concrete spraying range is complemented by concrete transporting equipment and batching plant to optimize the logistics of underground mining operations.

CONCRETE TRANSPORT



DIMENSIONS	
	MIXKRET5 MIXKRET4
Length	7.340 mm 6.595 mm
Width	2.200 mm 2.200 mm
Height	2.500 mm 2.500 mm
Turn. rad. outer	6.000 mm 5.770 mm
Turn. rad. inner	2.400 mm 2.400 mm

CONCRETE DRUM	
	MIXKRET5 MIXKRET4
Capacity	5 m³ 4 m³
Operation	Hydraulic

DIESEL ENGINE	
	MIXKRET5 MIXKRET4
Type	Turbo diesel, 6 cylinders
Power	168 kW 130 kW 225 HP 174 HP
rpm	2.200 2.200

TRANSMISSION	
	MIXKRET5 MIXKRET4
Type	Hydrostatic with continuous variation (ICVD)
Drive	4WD / 4WS

AXLES	
	MIXKRET5 MIXKRET4
Type	Heavy-duty planetary
Front	Fixed and directional
Rear	Swing and directional

PERFORMANCE	
	MIXKRET5 MIXKRET4
Maximum speed	20 km/h
Max. climbing ability	30 %



DIMENSIONS	
Length	16.449 mm
Width	10.665 mm
Height	2.560 mm

AGGREGATE STORAGE HOPPERS	
Hoppers equipped with electric vibrator	4 / 2 hoppers
Total capacity	14 / 7 m³

MIXING SET	
Mixer	With vertical axle TRH-750
Capacity	750 l
Useful vibrated concrete capacity	500 l per cycle

CONCRETE CONVEYOR BELT	
Length	14.000 mm
Smooth belt	600 mm

WATER DOSING	
Water feed system	With 1,1 kW pump + pressure control system
Connection with concrete mixer	By 1 1/2" galvanised pipes
Water tank	500 l

OPTIONALS	
Big bag filling hopper	1.500 kg
Silo	23.500 kg
Bag-cutting hopper	250 kg