

SPM 4210

WETKRET



CONCRETE SPRAYING EQUIPMENT



Putzmeister

Underground Technology



- 1 Proportional remote control for easy handling of arm movements, dual use (radio/cable).
- 2 Liquid additive pump, synchronized with the concrete flow.
- 3 Optional automatic lubrication system for proper machine maintenance.
- 4 Putzmeister concrete pump PM 1507 with maximum theoretical flow of 20 m³/h.
- 5 Agitator in hopper and grill with adjustable electric vibrator, for steel or polymer fibre pumping. Easy to open for maintenance and cleaning.
- 6 Control system with multilingual colour display, indicating concrete flow, additive dosage, faults, diagnoses and alarms.



1 Proportional remote control



2 Additive pump



3 Automatic lubrication of the concrete pump



4 Concrete pump PM 1507



5 Hopper designed for concrete spraying



6 Control panel display

PUTZMEISTER CONCRETE SPRAYING TECHNOLOGY



SPM 4210 WETKRET SERIES

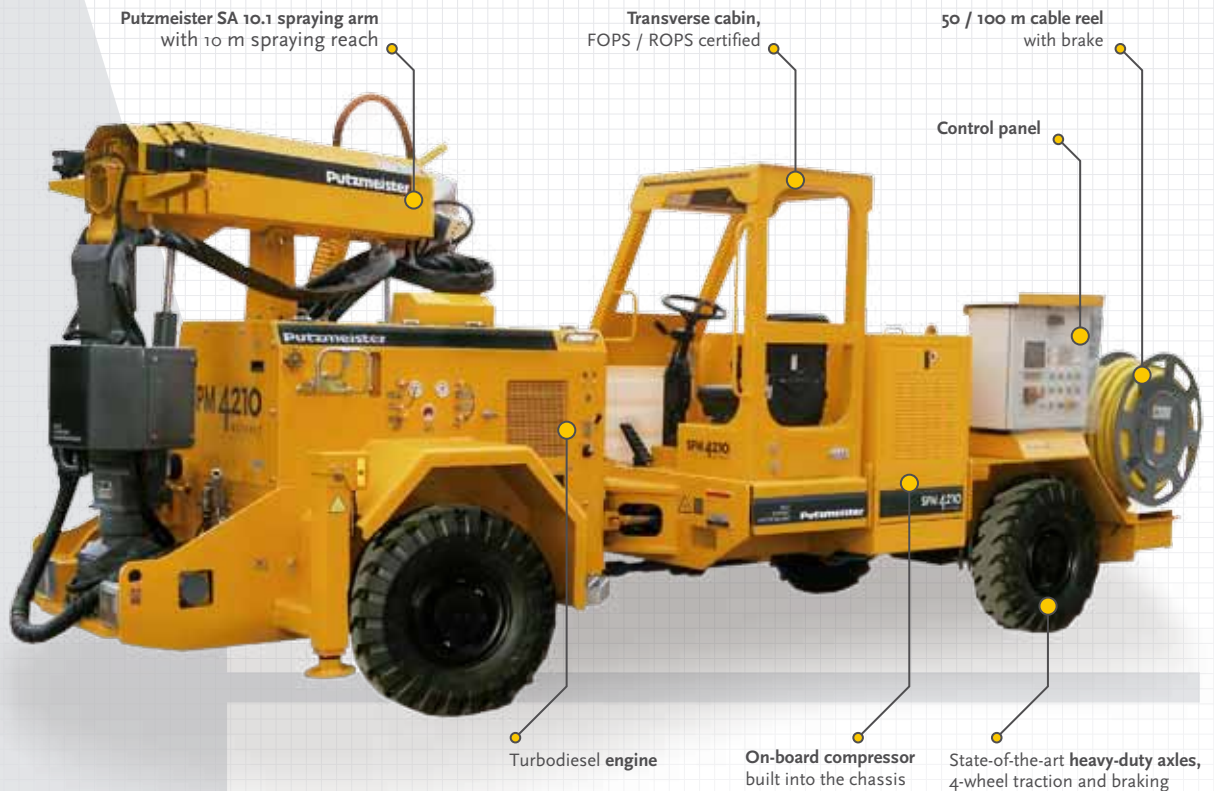
The SPM 4210 WETKRET series opens a new chapter in efficient technology for concrete spraying in mining. Its spraying arm, of Putzmeister in-house design and manufacture, has a reach of 10 m. The dual cable and wireless proportional remote control permits easy handling of the arm movements, besides regulation of the concrete flow and adjustment of

the additive dosage. With state-of-the-art axles, the heavy-duty chassis is suitable for the toughest working conditions.

At Putzmeister we devote our efforts to continually presenting the most efficient concrete spraying equipment as a complete system. With the SPM 4210 WETKRET a new stage in development has been reached.

**SPRAYING ARM
OF PUTZMEISTER
IN-HOUSE DESIGN
AND MANUFACTURE
PROVIDES 10M
SPRAYING REACH**

SPM 4210 WETKRET



SPM 4210 WETKRET

The standard version of the **SPM 4210 WETKRET** series is operated electrically and is optionally available with an electric air compressor built into the chassis.

SPM 4210 WETKRET DUAL DRIVE

The **SPM 4210 WETKRET DUAL DRIVE** version has a dual drive system so that all the components can be operated both by diesel engine and electrically. The unit is equipped with a catalytic converter as standard and is optionally available with an electric or diesel air compressor, built into the chassis.

SPM 4210 WETKRET ROTOR

The **SPM 4210 WETKRET ROTOR** version is ideal for mechanized dry mix shotcreting in mining, offering the same level of sturdiness in the chassis as the standard model. The unit includes the option of an air compressor built into the chassis.

SPRAYING ARM: STRENGTH, ERGONOMIC DESIGN AND REACH

With a vertical spraying reach of 10 m, the spraying arm provides the operator with high-speed reaction and precision in the telescopic arm opening and closing, raising and turning movements. The new arm design is reinforced with a cylinder-ring gear turning system. The hydraulic cylinders of the telescopic arm have been fitted externally and covered for full protection. In this way, easy access is available for maintenance without forgoing protection of the machine.

PUTZMEISTER CONCRETE PUMP: 20 m³/h

Putzmeister has been world famous as the manufacturer of concrete pumps par excellence for over 50 years. Putzmeister is synonymous with top quality, innovation and reliability. The concrete pump mounted on the equipment is specially designed for concrete spraying, guaranteeing high performance, low pulsations and a long life for the wear parts. The efficiency of the Putzmeister concrete pump is unique.

ALL CONTROLS AVAILABLE IN PROPORTIONAL DUAL REMOTE CONTROL, (RADIO/CABLE)

The SPM 4210 WETKRET series' proportional remote control permits full regulation of the concrete output as well as adjustments to the predefined additive dosage. In this way, the machine can cope with the changing working conditions in mines, where the rock varies in composition, strength and stability, so the machine operator must act flexibly in terms of concrete output and additive dosing, in accordance with the requirements regarding early strength and drying times in each specific situation.

All other functions of the machine are also available by means of remote control, including automatic spraying sequence start functions (air, concrete and additive), facilitating the operator's work.

ON-BOARD COMPRESSOR FOR TOTAL AUTONOMY

Despite its compact size, the SPM 4210 WETKRET series includes the option of an electric or diesel worm compressor built into the chassis, which endows it with

high mobility and the option of autonomous operation, an added value which is highly demanded.

AUTOMATIC SYNCHRONIZATION OF ADDITIVE DOSAGE AND CONCRETE FLOW

The hydraulically-operated synchronized peristaltic additive pump is regulated by closed loop and controlled electronically. It is equipped with an automatic dosing device proportional to the concrete flow, thereby assuring spraying accuracy and quality.

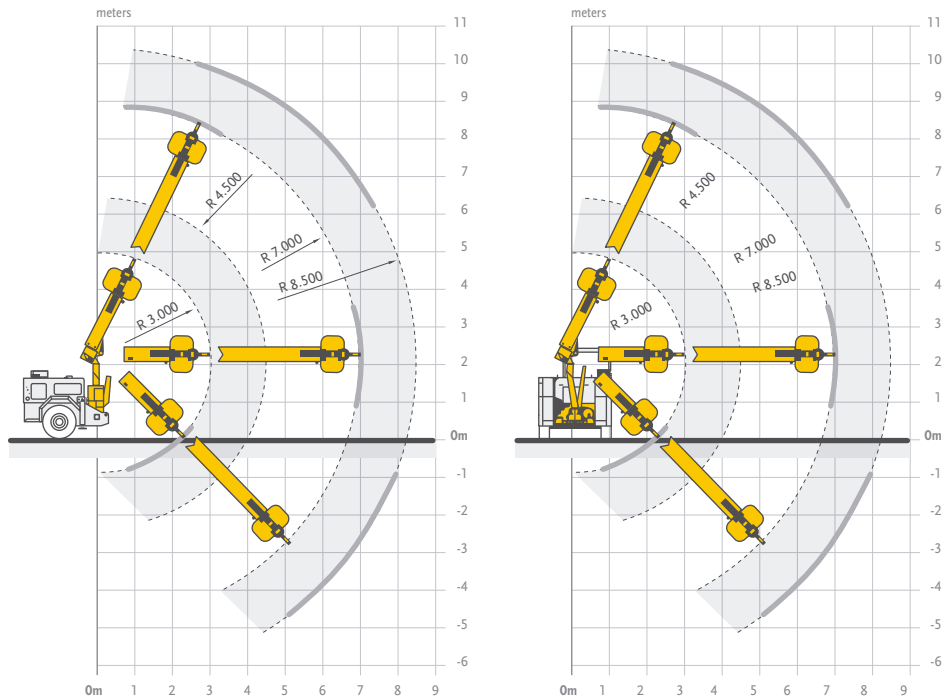
HEAVY-DUTY CHASSIS WITH STATE-OF-THE-ART AXLES

The chassis is designed to meet mining demands and made of high-resistance steel to stand the harshest working conditions. The SPM 4210 WETKRET incorporates innovative, state-of-the-art axles as well as a reinforced turning system. Central articulated turning and the small size of the machine endow it with magnificent manoeuvrability, which is a must particularly in low-profile mines. Its four driving wheels and the four-wheel braking system increase the manoeuvrability of the machine in difficult terrain even more. Its excellent climbing capacity and great ground clearance facilitate off-road driving.

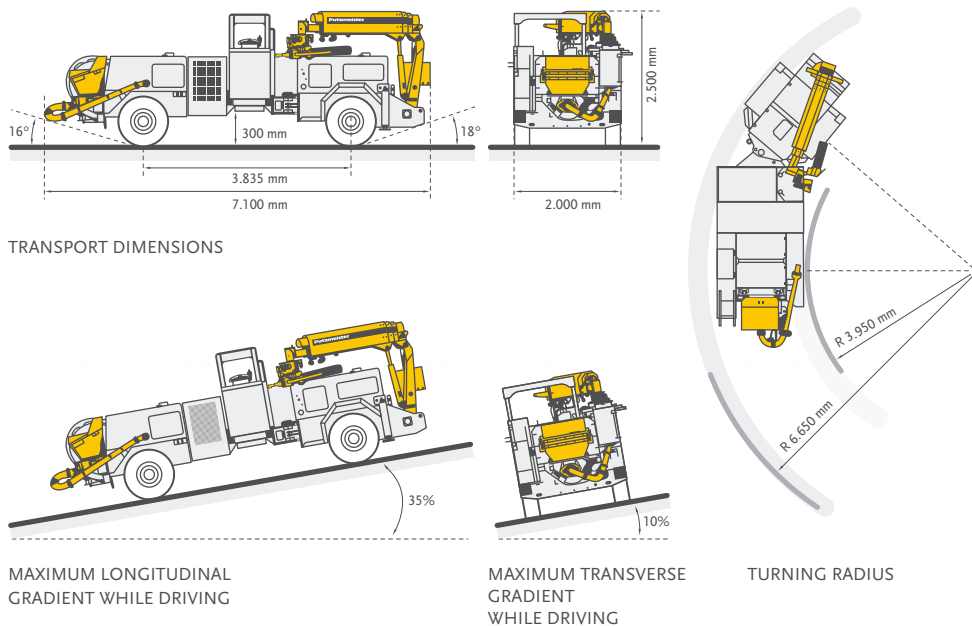
CONFIGURATION OF THE EQUIPMENT ACCORDING TO THE WORKING ENVIRONMENT

Putzmeister offers its customers a series of optional equipment perfectly studied to provide the best possible configuration according to the characteristics of the working environment.

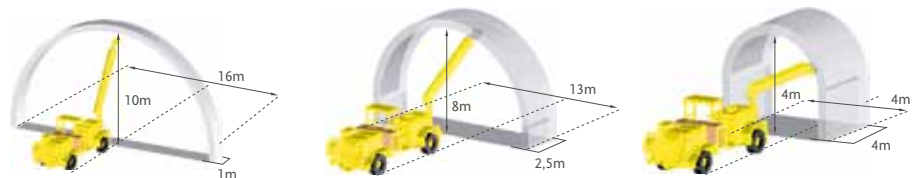
SPRAYING ARM REACH DIAGRAMS



DIMENSIONS AND TURNING RADIUS



SPRAYING AREA



DATA SHEET

PUTZMEISTER TELESCOPIC SPRAYING ARM SA 10.1

| | |
|---|---|
| Maximum spraying reach vertical / horizontal | 10 m / 8 m |
| Minimum unfolding section vertical / horizontal | 2.5 m / 3.3 m |
| Number of arm extensions | 4 sections (3 telescopic), proportional hydraulic drive |
| Telescopic stroke | 4 m |
| Number of axles / degrees of freedom | 6 |
| Maximum arm angle | +65° / -40° |
| Lights | 2 Xenon 24 V 45W spotlights |

SPRAYING HEAD

| | |
|-------------|---------------|
| Rotation | 360° |
| Inclination | +120° / -120° |
| Nutation | 10° |
| Nozzle | DN40 |

PUTZMEISTER PROPORTIONAL REMOTE CONTROL

| | |
|--------------|----------------------------------|
| Drive | Electric, dual use (radio/cable) |
| Cable length | 20 m |

PUTZMEISTER CONCRETE PUMP PM 1507

| | |
|------------------------------------|--------------------------------|
| Type | Double-piston, hydraulic drive |
| Max. flow (theor.) | 20 m³/h (variable 4 - 20 m³/h) |
| Transport cylinder diameter | 150 mm |
| Max. pressure (theor.) on concrete | 65 bar |
| Max. aggregate size | 16 mm |
| Electric motor power | 37 kW |
| Power | at 400V 50 Hz or at 440V 60 Hz |

HOPPER

| | |
|----------------------|-----------|
| Full hopper capacity | 250 l |
| Filling height | 1.300 mm |
| Spotlight | 24 V/70 W |

ADDITIVE PUMP SYNCHRONIZED WITH CONCRETE PUMPING

| | |
|--------------------------|--------------|
| Adjustment range | 60 – 500 l/h |
| Maximum working pressure | 7,5 bar |
| Additive tank | 400 l |
| Control system | PLC |

HIGH PRESSURE WATER PUMP FOR CLEANING

| | |
|---------------|-----------|
| Max. pressure | 140 bar |
| Flow | 10.8 l/mm |
| Hose | 15 m |

CABLE REEL

| | |
|--------------|----------------------------------|
| Operation | Manual |
| Cable length | 50 m |
| Power | at 400 V 50 Hz or at 440 V 60 Hz |
| Diameter | 900 mm |

PUTZMEISTER ARTICULATED OFF-ROAD VEHICLE, 4-WHEEL DRIVE

| | |
|----------------------|---|
| Engine | Turbodiesel, 4 cylinders |
| Engine power | 54,7 kW at 2.600 rpm |
| Engine emissions | According to EU-Stage III A / EPA-Tier 3 |
| Transmission | Hydrostatic |
| Gearbox | 2-speed in both directions |
| Steering | Hydraulic, articulated steering |
| Traction | 4 WD |
| Speed | Max. 20 km/h |
| Braking system | 4-wheel multi-disc service brakes in oil bath, negative parking brake with mechanical release |
| Working lights | 4 x 24 V 25 W LED spotlights |
| Driver cabin | FOPS/ROPS certified. Adjustable driver's seat with mechanical suspension and safety belt |
| Oil tank | 70 l |
| Electrical equipment | 2 batteries, 12 V / 70 A |
| Diesel tank | 65 l |

WEIGHT

9.500 kg / 8.850 kg without compressor

OPTIONAL EQUIPMENT

ELECTRIC COMPRESSOR

| | |
|-----------------------|------------|
| Power | 37 kW |
| Max. working pressure | 7,5 bar |
| Max. air flow | 6,8 m³/min |

DIESEL COMPRESSOR (DUAL DRIVE VERSION)

| | |
|-----------------------|------------|
| Power | 54,7 kW |
| Max. working pressure | 7 bar |
| Max. air flow | 6,8 m³/min |

FIRE EXTINGUISHING SYSTEM, DUAL AGENT (POWDER)

| | |
|-------|-----------------------|
| Drive | Manual, 6 diffusers |
| Tank | 11.3 kg of dry powder |

FULL WHEELS FOR MINING

| | |
|----------|-------------------------------|
| Tyres | MICHELIN X Mine D2 10.00 R 15 |
| Rim size | 7,5 x 15" |

CATALYTIC CONVERTER (STANDARD ON DUAL DRIVE VERSION)

| | |
|----------------|------------------------------------|
| Max. reduction | CO -90%; HC -80%; black smoke -30% |
|----------------|------------------------------------|

PARTICLE FILTER

| | |
|----------------|---|
| Max. reduction | CO: -90%; HC: 60-80%; black smoke/particles: -99% |
|----------------|---|

OTHER

Automatic lubrication system
Stainless steel control panel
Special low-profile hopper (1.150 mm)
Additional 50 m of cable

SPECIAL VOLTAGES

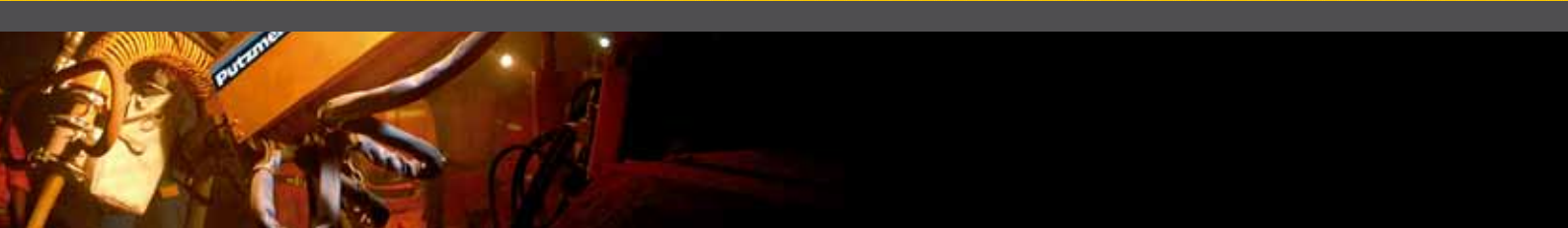
| | |
|-------|--|
| Power | at 660 V 50/60 Hz or at 1.000 V 50/60 Hz |
|-------|--|

Consult Putzmeister for special configurations

PUTZMEISTER: CONCRETE SPRAYING TECHNOLOGY

For over 30 years Putzmeister has been designing, developing and producing concrete spraying equipment for mines and tunnels. The experience acquired over these years together with ongoing investment in research and development have made Putzmeister a leading company in this field of application. It is this experience and search for added value for our customer that makes us different.

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 customer's needs and the toughest working conditions.

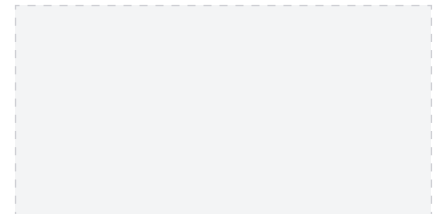


Putzmeister
Underground Technology

SPM 4210
WETKRET

putzmeisterunderground.com
info@putzmeisterunderground.com

DISTRIBUTED BY:



Strategic alliance for the development of concrete spraying technology

PUTZMEISTER IS A MEMBER OF:



CERTIFIED COMPANY:



PUTZMEISTER IBÉRICA S.A., PUTZMEISTER UNDERGROUND DIVISION. CAMINO DE HORMIGUERAS 173, 28031 MADRID, SPAIN - TEL. +34 91 428 81 00 - INFO@PUTZMEISTER.ES

This is a merely informative, non-binding document. Maximum theoretical values listed. Specifications are subject to change without prior notice. Photos and drawings are for illustrative purposes only. For available options, please consult the factory.