Solutions for Protective Coating

With the PROTEC product family, WAGNER offers individual solutions for protective coatings for bridges, containers, pipelines and wind turbines, among others.

The PROTEC product family's GM 1 airless manual guns, 2K mixing and dosing systems, and high-pressure piston pumps are ideal for processing highly viscous materials and reliably protect the coated objects from external influences such as precipitation, chemical reactions, or salt water. The durable and robust components ensure high availability of your coating system: For excellent results even under the toughest working conditions.

- Powerful, robust and reliable design
- Long service life and easy maintenance
- Optimal coating results even in continuous operation

A firm grip on excellent coatings: The powerful and durable WAGNER PROTEC GM 1 airless manual gun is perfect for heavy corrosion protection applications.

The **WAGNER PROTEC GM 1** airless manual gun is impressive not only because of its technical features but also because of its ergonomic design: The well-balanced and lightweight body of the gun ensures a good grip and comfortable handling with every use.

- Powerful, robust and reliable
- Excellent ergonomics and handling
- Optimal atomization properties

Easy handling
Easily adjustable nozzle guard. Quick removal of clogging by simply turning the nozzle.

Robust and reliable
Ready for use at the highest pressures and under the toughest working conditions. The aluminum housing makes the gun extremely robust and at the same time very light.

High durability
The sturdy valve mechanism with carbide insert on the trigger ensures a long service life for the gun.

Comfortable working
The lightweight and ergonomic gun with smooth-running swivel joint on the hose connection enables fatigue-free working. The thermally insulated handle with support in the crook of the thumb also allows the use of heated material.

Low pull-off force
Noticeably low trigger and holding force even at maximum material pressure. Trigger for two or four fingers, depending on the version.

WAGNER cage filter for high filter performance
Fast and easy, tool-free change of the WAGNER cage filter for reliable operation and flawless surfaces.

PROTEC GM 1 airless manual gun

Wide range of accessories

Useful additions to your WAGNER PROTEC GM 1 for optimal interaction of function and performance.

WAGNER cage filter

High absorption capacity. Collects the dirt inside the filter. This allows a quick and clean filter change. The conical shape prevents incorrect installation.

Material hoses

Burst-proof up to 2,000 bar with simultaneous high flexibility and stability. Short hose whips with smaller diameter in front of the gun allow maximum freedom of movement.

WAGNER airless nozzles

The reversing function on all nozzle types allows the quick spraying out of nozzle blockages. Available with many different sizes and spray angles.

Technical data

Manual guns	GM 1-530	GM 1-350
Trigger	4-finger	2-finger
Material pressure max.	530 bar	350 bar
Thread nozzle guard	7/8" - 14 UNF - 2A	7/8" - 14 UNF - 2A
Material connection	A – ¼" NPS	A – ¼" NPS
Material temperature max.	80 °C	80 °C
Weight	580 g	560 g
Noise level max.	85 dB(A)	85 dB(A)
Length	160 mm	160 mm
Height	188 mm	188 mm
ATEX certification	Ex II 2G X	Ex II 2G X

Processable materials

- Solvent-based & water-based materials
- Zinc dust paints
- 2K corrosion protection paints
- High-solids materials
- Anti-fouling coatings
- Epoxy primers

Full power and optimum corrosion protection: The WAGNER PROTEC high-pressure piston pumps offer powerful technology for high coating thicknesses.

For heavy corrosion protection with premixed material WAGNER has developed the **PROTEC high-pressure piston pumps**. A consistent solution for extreme challenges.

- Extremely low-pulsation and maintenance-free control system for high coating quality - even in continuous operation.
- Ideal for thick-film corrosion protection - even with large material application and multi-gun use.
- Extremely robust, reliable and easy to maintain in daily use.

Consistent performance and high operating comfort

No loss of performance due to icing even if there is a lot of moisture in the air. Full pressure reversing ensures uncompromising performance. The soft start and automatic pressure relief can be conveniently controlled with the integrated 3-way main valve.

Additional air filter

The filter protects the air motor from poor air quality at the point of use and ensures reliable operation.

Extra large valves and maximum suction power

The pump inlet valve with an extra large valve diameter of 45 mm enables consistently reliable suction. For cleaning, simply strike with a hammer for quick disassembly. The 38 mm (1 ½“) large and very flexible suction hose ensures maximum suction performance with the extra large inlet valves.

Robust and stable

The RackCaddy is extremely robust and provides safe all-round protection for pump and accessories - even in the event of a fall. Integrated suspension facilitates crane transport. The large wheels with solid rubber tires ensure effortless transport to the job site. In addition, the RackCaddy offers a convenient suspension option for the gun, material hose and suction hose.

Paint section without compromise

Large paint sections with up to 240 cm^3 double stroke volume ensure low piston speed and high dynamic pressure. Large valve cross-sections and self-adjusting „long life“ packings enable the use of highly viscous and abrasive materials.

PROTEC high-pressure piston pumps

Ready for immediate use

From ready-to-use spraypacks that can be connected immediately to complex, fully automated paint supply systems - you can configure your individual solution with our modular system.

Contact us for more information. We will be happy to help you with your selection.

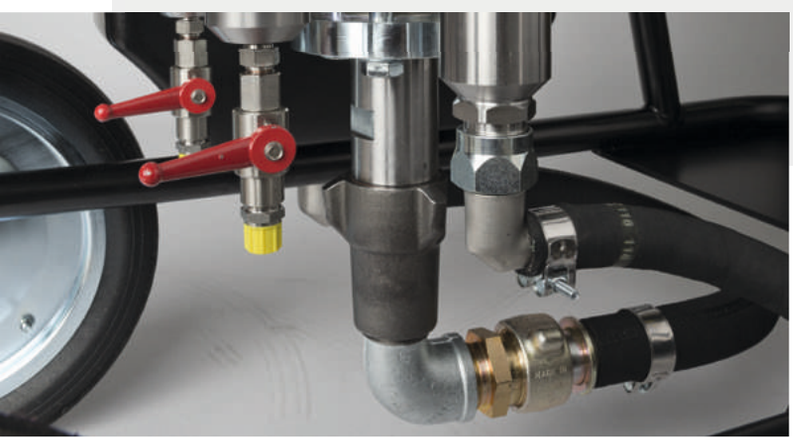
Technical data

Pumps	Leopard 48-110	PROTEC 95-150	PROTEC 72-200	PROTEC 60-240
Transmission ratio	48:1	95:1	72:1	60:1
Material pressure max.	370 bar	530 bar	530 bar	480 bar
Volume flow per double stroke	110 cm^3/double stroke	150 cm^3/double stroke	200 cm^3/double stroke	240 cm^3/double stroke
Recommended flow rate	0.5 ... 2 l/min	0.7 ... 3 l/min	1 ... 4 l/min	1.5 ... 6 l/min
Recommended material pressure	150 ... 300 bar	200 ... 400 bar	150 ... 400 bar	200 ... 400 bar
Areas of application	Small to medium surfaces Medium viscosity	Medium to large surfaces High viscosity	Large surfaces High viscosity	Very large surfaces Very high viscosity
Zinc dust paint, iron mica		●	●	●
Flame protection materials			●	●
Anti-foulings	●	●	●	●
Solvent-based materials	●	●	●	●
Water-based materials	●	●	●	●

The WAGNER PROTEC 2K mixing and dosing system was specially developed for heavy corrosion protection applications and is almost as easy to operate as a normal piston pump.

Wherever highly filled 2K materials are used, the **WAGNER PROTEC 2K** takes over both the precise dosing of the components and the complex and time-consuming mixing.

- You save time because you don't have to mix and stir any material beforehand.
- You save material because you always mix only as much as you need.
- You work without worrying that the pot life will expire before the coating is finished.
- You save time and material because you don't have to flush the entire system if you stop working for a long time, but only those parts of the system that contain mixed material.
- You avoid coating errors: The correct mixing ratio is generated by the system. This ensures an excellent coating quality.



Powerful and precise
Powerful due to the use of WAGNER PROTEC high-pressure piston pumps even with highly viscous material and high flow for large coating thicknesses. Automatic and continuous feeding of the coating materials results in a precise mixing ratio.

Reliable supply
Two large containers and the large inlet valves ensure a constant and reliable material supply.

Robust and mobile
Very good rolling characteristics and no air loss due to the large solid rubber tires. The tail wheel with integrated brake ensures a safe stand. The robust trolley with suspension device protects the components and makes crane transport possible.

Flexible range of application
The mixing ratio can be changed by exchanging the paint sections. The mixing block has a flushing connection and can be disassembled for use as an external mixer. Ideal for fast reacting and expensive materials.

Safe working
The pressure display is safely in view. Automatic pressure relief ensures maximum safety. The pressure relief valve starts automatic circulation if a container accidentally becomes empty.

PROTEC 2K mixing and dosing system

Efficiency that really makes an impression

The WAGNER PROTEC 2K mixes only the amount of material you actually need. You no longer have to dispose of excess material at great expense. In addition, the integrated flushing pump means that only those parts of the system that have come into contact with the mixed material need to be flushed: Mixing block, material hose and gun. In comparison, you have to completely flush and clean a system with premixed material. This costs significantly more time and solvent.

Dosing and mixing of the components is "just in time" and fully automated when the resin and hardener are sucked in. Coating quality is significantly increased and manual error rates are eliminated.

The paint sections contain only unmixed material, which is much easier to flush than components that have already been mixed. This increases the maintenance intervals considerably. The WAGNER paint sections can be dismantled in just a few steps and are easy to maintain.

	Conventional 1K spraypack	PROTEC 2K spraypack
Dosing of the correct hardener quantity	High demands on precision	Not applicable
Stirring and mixing	Time-consuming	Not applicable
Pot life	Time critical as soon as the resin is pre-mixed with the hardener	Material is freshly mixed directly before application
Flushing and cleaning	Complete flushing of the system	Only mixed material in mixer and material hose
Waste	Excess mixed material must be disposed of	Not applicable
Solvent consumption during flushing	10 - 15 liters, depending on size of pump	2 - 3 liters, depending on material hose
Paint loss during flushing	3 - 4 liters, depending on size of pump	1 - 2 liters, depending on material hose

Technical data

PROTEC 2K	PROTEC 2K 75-150/38	PROTEC 2K 70-150/50	PROTEC 2K 64-150/75	PROTEC 2K 77-110/50	PROTEC 2K 65-110/110
Mixing ratio	4:1	3:1	2:1	1.5:1	1:1
Transmission ratio	75:1	70:1	64:1	77:1	65:1
Material pressure max.	500 bar	465 bar	415 bar	500 bar	420 bar
Volume flow per double stroke	188 cm^3	200 cm^3	225 cm^3	160 cm^3	220 cm^3
Paint section A double stroke vol.	150 cm^3	150 cm^3	150 cm^3	110 cm^3	110 cm^3
Paint section B double stroke vol.	38 cm^3	50 cm^3	75 cm^3	50 cm^3	110 cm^3
Material inlet (container)	2x 27 liters	2x 27 liters	2x 27 liters	2x 27 liters	2x 27 liters
ATEX certification	II 2G cIIB T3 / T4 Gb X	II 2G cIIB T3 / T4 Gb X	II 2G cIIB T3 / T4 Gb X	II 2G cIIB T3 / T4 Gb X	II 2G cIIB T3 / T4 Gb X

*The mixing ratio can be changed at any time by exchanging the paint sections.

Accessories

Everything for a powerful unit

For the processing of heavy, highly filled corrosion protection materials and to complement the PROTEC product family, WAGNER offers an extensive range of accessories.

Material hoses

Extensive range of material hoses with different diameters. Also available are hose whips for better handling.

Heatable containers

Extremely viscous materials can be made processable by using heating containers.

Material heater

Professional continuous flow heater for better material flow properties and more uniform coating quality. Mounted protected in the trolley.

Air filters

Various air filters to protect air motors from wear caused by poor compressed-air quality.

2K processing with complete process reliability

The TwinControl electronic mixing and dosing system is suitable for a wide range of applications and coating materials thanks to its cost-effectiveness, compactness and ease of operation. The TwinControl scores with a comprehensive monitoring concept for permanent monitoring and control of mixing accuracy and pot life. Faulty coatings are reliably excluded by warning and error messages.

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