Magically simple powder coating

Sprint 2 manual systems

Take a close look.

Sprint 2 Expert B W

Sprint 2 Expert H W

Sprint 2 manual systems

Sprint 2 H

Sprint 2 B

Illustrations show special accessories: Container is not included in the scope of delivery.

WAGNER

Magical coating:
The Sprint 2 Expert is the master solution for manual coating tasks.

Quick-Link injector B, open

Quick-Link injector offers numerous advantages
The innovative nozzle geometries of the new injector reduce the air requirement. Combined with a smaller hose diameter, the result is a significantly softer powder cloud with lower speed. The Quick-Link injector enables a wide range of applications - from fine, decorative coatings on small parts to corrosion protection for large components.
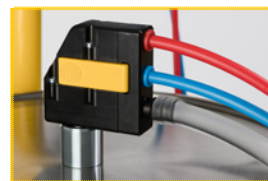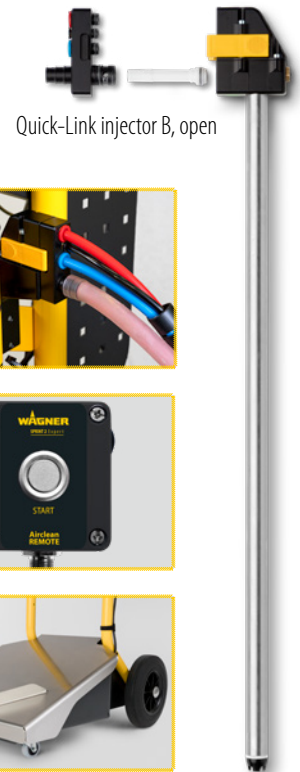
Fast cleaning & color change processes
Thanks to the Quick-Link coupling, all powder and air hoses can be detached in one easy step. The integrated scraper ring in the swivel arm scrapes off powder residues on the outside of the lance. As the injector and suction lance are firmly screwed together, fewer interfaces need to be cleaned manually.

Airclean kit: Reliable color change in less than 30 seconds
The optional cleaning kit Airclean can be mounted on the trolley of the manual system and ensures even faster color changes: It enables automatic internal cleaning of the hose and gun using additional compressed air. The Airclean Remote, which can be flexibly positioned using magnetic feet, is available for remote start of the cleaning process.

Robust design
Assembly of the manual system is minimal thanks to the pre-assembled components. The sturdy equipment trolley with electric vibrating table ensures space-saving, safe working in any environment.

Picture above: Scraper ring in the swivel arm
Picture center: Quick-Link injector B
Picture below: Quick-Link injector H

Picture above: Airclean kit with hose
Picture center: Airclean Remote
Picture below: Electric vibrating table

WACON Sprint 2 Expert control unit

WACON Sprint 2 Expert:
Simple menu navigation with WAGNER Wizard

Right: Optionally with EtherCAT interface

7-inch touchscreen with intuitive operation
All relevant parameters for the coating job are set via the touchscreen. The clear menu navigation includes recipe management, error history, operating hours and maintenance counter as well as a user management.

WAGNER Wizard: The digital coating assistant
With the WAGNER Wizard, even inexperienced users can find the right recipe for any coating as if by magic. In 5 simple steps you select the workpiece geometry, size, coating structure, desired coating thickness and powder type. The wizard uses these parameters to determine the ideal recipe. It also provides recommendations for suitable accessories (e.g. nozzle type, nozzle extension) and the necessary gun distance. So you can get started right away!

Digital Surface Optimizer (DSO)
The DSO function reduces overcharge effects such as orange peel or edge build-up at the touch of a button. This is particularly advantageous for decorative coatings on complex components or when using challenging powder coatings.

Flexible process documentation & data management
All process data can be conveniently exported in the form of production or service logbooks via a USB interface. Other optional interfaces enable the control unit to be connected to higher-level systems, robot technology or cloud solutions such as the COATIFY information and management platform.

Sprint 2 Expert manual system

PEM-X1 manual gun: Magically light and with impressive performance

Unique application efficiency
The integrated high-performance cascade keeps the high voltage measurably stable even at 100 kV, thereby ensuring consistently first-class coating performance. There are three characteristic curves to choose from, which enable optimum electrostatic powder charging even with different powder properties.

High user-friendliness
The integrated buttons on the gun allow a quick adjustment of the powder quantity. You can quickly switch to a special recipe with a double-click on the trigger lever. Factory-set recipes can also be assigned their own parameters.

Ergonomic and fatigue-free working
At just 490 g, the PEM-X1 is the lightweight among powder spray guns and at the same time extremely robust. This enables fatigue-free working, even over longer shifts.

Further highlights of the Sprint 2 Expert

Consumption monitoring with powder scale
A powder scale under the base plate is used for precise monitoring of the powder consumption. It displays the weight in the powder box and automatically sets measuring points, which are documented in a logbook with the active user, selected recipe and coating period. Relevant coating data can be bundled and analyzed to determine which user coated with which recipe and when, and how much powder was used.

Well equipped for every application
The multifunctional head module with standardized perforated plate structure offers dust-protected storage compartments and hanging options for tools and accessories. This keeps everything tidy and within easy reach at the workplace. The manual system can also be quickly upgraded to a double system with two guns. The head module offers space for the installation of a second control unit.

Sprint 2: Magical performance with a classic range of functions

Quick-Link injector offers numerous advantages

The innovative nozzle geometries of the new injector reduce the air requirement and the hose diameter needed, resulting in a significantly softer powder cloud at a lower speed. This results in a wide range of applications - from fine, decorative coatings for small parts to corrosion protection for large components.

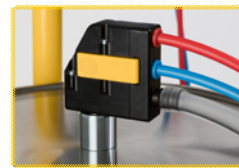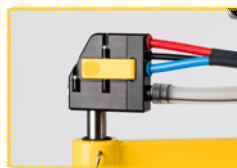**Fast cleaning & color change processes**

Thanks to the Quick-Link coupling, all powder and air hoses can be detached in one easy step. The integrated scraper ring in the swivel arm scrapes off powder residues on the outside of the lance. As the injector and suction lance are firmly screwed together, fewer interfaces need to be cleaned manually.

Ergonomic gun PEM-X1: Unique application efficiency

The integrated high-performance cascade of the lightweight gun keeps the high voltage measurably stable even at 100 kV, thus ensuring a consistently first-class coating performance. There are three characteristic curves to choose from, which enable optimum electrostatic powder charging even with different powder properties.

Robust design

Assembly of the manual system is minimal thanks to the pre-assembled components. The sturdy equipment trolley with electric vibrating table ensures space-saving, safe working in any environment.

WACON Sprint 2 X & WACON Sprint 2 XE control units

High precision

The WAGNER Air Flow Control (AFC) technology ensures precise powder control. A high-precision, closed control loop constantly measures and regulates the air volume during the coating process and thus generates a uniform powder cloud for high-quality coating results.

Digital Surface Optimizer (DSO)

The DSO function reduces overcharge effects such as orange peel or edge build-up at the touch of a button. This is particularly advantageous for decorative coatings on complex components or when using challenging powder coatings.

Easy operation

The coater has all important parameters at a glance and can make any adjustments via a central control dial. Four recipes can be accessed directly via quick selection. A further 46 recipes can be called up using the rotary knob.

Connection variants for different applications

A vibration motor can be connected to the WACON Sprint 2 XE control unit. It is supplied with power and started automatically by the gun trigger. The WACON Sprint 2 X has a mains output that can be used to supply power to other control units.

WACON Sprint 2 X and WACON Sprint 2 XE

Sprint 2 sets

Sets for special applications

3-liter table set (T)

In addition to the control unit and manual gun, the table set includes a compact vibrating table with a 3-liter fluid hopper attachment, Hi-Coat injector and 9 mm powder hose. Extremely fine coatings are achieved with this setup - e.g. in laboratory environments, for special applications such as the non-destructive testing of cast parts or for small parts with very high surface quality requirements (e.g. wheel finishing).

Sprint 2 T
Sprint 2 Expert T

Cup gun case set (CG)

The mobile case set is suitable for individual parts and small quantities, as well as for laboratory and development purposes. It is easy to set up anywhere and can be operated directly from the case. The PEM-X1 CG cup gun impresses with its simple cup change concept for super-fast color changes.

Sprint 2 Expert CG

Sprint 2 CG

Manual powder set (MPS)

The manual powder set consists of the core components for setting up a manual coating system or as a pre-/post-coating workstation in an automatic system: Manual gun PEM-X1, control unit (WACON Sprint 2 Expert / WACON Sprint 2 X), PI-F1 injector and powder hose set.

Sprint 2 MPS, Sprint 2 Expert MPS

Automatic powder set (APS)

The automatic powder set consists of the core components for integration into individual automatic solutions in system engineering and is available in different versions: PEA-X1 automatic gun, control unit (WACON Sprint 2 Expert / WACON Sprint 2 X), PI-F1 injector and gun cable.

Sprint 2 APS, Sprint 2 Expert APS

Achieve excellent results with these configurations

Sprint 2 manual systems

	Sprint 2 B	Sprint 2 H	Sprint 2 T	Sprint 2 CG	Sprint 2 MPS	Sprint 2 APS
Powder feeding	Original box	60-liter container*	3-liter fluid hopper	Cup	Fluid container / box (powder center)	Fluid container / box (powder center)
Type	Trolley	Trolley	Table set	Case set	Components	Components
Control unit	WACON Sprint 2 XE	WACON Sprint 2 XE	WACON Sprint 2 X	WACON Sprint 2 X	WACON Sprint 2 X	WACON Sprint 2 X
Powder gun	PEM-X1 (manual)	PEM-X1 (manual)	PEM-X1 (manual)	PEM-X1 CG (cup gun)	PEM-X1 (manual)	PEA-X1 (automatic)
Injector	Quick-Link B Optional: Quick-Link Hi-Coat B	Quick-Link H Optional: Quick-Link Hi-Coat H	Quick-Link Hi-Coat H	Integrated in gun	PI-F1	PI-F1
Cleaning / color change	Quick-Link coupling / Integrated scraper ring	Quick-Link coupling	-	-	-	-
AFC technology	●	●	●	●	●	●
DSO function	●	●	●	●	●	●
Double system [Order number]	○ [2470706]	○ [on request]	-	-	-	-
Order number	2465744 (EU) 2466208 (US) 2466210 (JP)	2465745 (EU) 2466209 (US/JP)	2467116 (EU) - (US/JP)	2467114 (EU) 2467115 (US/JP)	2467123 (EU) 2467124 (US/JP)	2467120 (10m) 2467121 (20m) 2467122 (20m XL)
Special variants	-	2480306 (enamel)	-	-	2467125 (F+R) 2473403 (Quick-Link H)	2476314 (20m Tribo) 2476313 (20m pos. cascade)

* = Container is not included in the scope of delivery, please order separately.
● = Standard range of functions
○ = Optional accessory / function

Code	Meaning	Code	Meaning
B	Box	APS	Automatic Powder Set
H	Hopper	W	Weight cell
T	Table	F	Flat jet nozzle
CG	Cup Gun	R	Round jet nozzle
MPS	Manual Powder Set	EC	EtherCAT

Sprint 2 Expert manual systems

	Sprint 2 Expert B W	Sprint 2 Expert H W	Sprint 2 Expert T	Sprint 2 Expert CG	Sprint 2 Expert MPS	Sprint 2 Expert APS
Powder feeding	Original box	60-liter container*	3-liter fluid hopper	Cup	Fluid container / box (powder center)	Fluid container / box (powder center)
Type	Trolley	Trolley	Table set	Case set	Components	Components
Control unit	WACON Sprint 2 Expert	WACON Sprint 2 Expert	WACON Sprint 2 Expert	WACON Sprint 2 Expert	WACON Sprint 2 Expert	WACON Sprint 2 Expert
Powder gun	PEM-X1 (manual)	PEM-X1 (manual)	PEM-X1 (manual)	PEM-X1 CG (cup gun)	PEM-X1 (manual)	PEA-X1 (automatic)
Injector	Quick-Link B Optional: Quick-Link Hi-Coat B	Quick-Link H Optional: Quick-Link Hi-Coat H	Quick-Link Hi-Coat H	Integrated in gun	PI-F1	PI-F1
Cleaning / color change	Quick-Link coupling / Integrated scraper ring	Quick-Link coupling	-	-	-	-
Automated internal cleaning	○	○	-	-	-	-
AFC technology	●	●	●	●	●	●
DSO function	●	●	●	●	●	●
WAGNER Wizard	●	●	●	●	●	●
Process documentation & data management	●	●	●	●	●	●
Powder scale	●	●	-	-	-	-
Multifunctional head module	●	●	-	-	-	-
Double system [Order number]	○ [2474941 / 2478881 (10m)]	○ [on request]	-	-	-	-
Airclean kit [Order number]	○ [2477212 / 2481592 (Dual)]	○ [2477212 / 2481592 (Dual)]	-	-	-	-
Airclean Remote [Order number]	○ [2481516]	○ [2481516]	-	-	-	-
Connection box [Order number]	○ [2475894]	○ [2475894]	-	-	-	-
Bus interface EtherCAT	○	○	-	-	○	○
Order number	2473752 (EU) 2474779 (EtherCAT) 2473753 (US) 2473754 (JP)	2473766 (EU) 2474781 (EtherCAT) 2473767 (US/JP) 2474782 (US EtherCAT)	2474534 (EU) - (US/JP)	2474532 (EU) 2474533 (US/JP)	2474333 (EU) 2474343 (EtherCAT) 2474334 (US/JP) 2474344 (US EtherCAT)	2474324 (10m) 2474330 (20m) 2474331 (20m XL)
Special variants	-	-	-	-	2474345 (F+R)	2474340 (10m EtherCAT) 2474341 (20m EtherCAT) 2474342 (20m XL EtherCAT)

* = Container is not included in the scope of delivery, please order separately.
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Technical data

Overview control units

	WACON Sprint 2 X	WACON Sprint 2 XE	WACON Sprint 2 Expert	WACON Sprint 2 Expert EC
Application with	Variants without vibration motor: Sprint 2 MPS Sprint 2 APS Sprint 2 CG Sprint 2 T	Variants with vibration motor: Sprint 2 B Sprint 2 H	Standard variants: Sprint 2 Expert B W Sprint 2 Expert H W Sprint 2 MPS Sprint 2 APS Sprint 2 CG Sprint 2 T	Variants with EtherCAT interface: Sprint 2 Expert B W EC Sprint 2 Expert H W EC Sprint 2 MPS EC Sprint 2 APS EC
Control vibration motor	-	●	●	●
Dimensions (W x D x H)	270 x 260 x 137 mm	270 x 260 x 137 mm	270 x 236 x 137 mm	270 x 236 x 137 mm
Weight	3.9 kg	4.0 kg	4.35 kg	4.45 kg
Type	CE 2813 ⟨Ex⟩ II 3(2)D IP64 80 ℃	CE 2813 ⟨Ex⟩ II 3(2)D IP64 80 ℃	CE 2813 ⟨Ex⟩ II 3(2)D IP54 80 ℃	CE 2813 ⟨Ex⟩ II 3(2)D IP54 80 ℃
ATEX certification	PTB 12 ATEX 5001	PTB 12 ATEX 5001	PTB 24 ATEX 5003	PTB 24 ATEX 5003
Nominal input voltage	90 – 250 VAC	90 – 250 VAC	90 – 250 VAC	90 – 250 VAC
Frequency	47 - 63 Hz	47 - 63 Hz	47 - 63 Hz	47 - 63 Hz
Order number	2463345	2463347	2469304	2467875

Overview injectors

	Quick-Link B	Quick-Link H	Quick-Link Hi-Coat B	Quick-Link Hi-Coat H	PI-F1
Application with	Sprint 2 B Sprint 2 Expert B W	Sprint 2 H Sprint 2 Expert H W	Optional accessory	Sprint 2 T Sprint 2 Expert T	Sprint 2 MPS Sprint 2 APS Sprint 2 Expert MPS Sprint 2 Expert APS
Order number	2466079	2466080	2467892	2467893	241622

Overview manual guns

	PEM-X1	PEM-X1 CG
Dimensions	335 mm	365 mm
Weight	490 g	530 g (without cup)
ATEX certification	PTB 12 ATEX 5002 EN50050-2	
Powder output	with Quick-Link injector up to 480 g/min	max. 200 g/min
Order number	2322587	2322588

The right accessories for individual requirements

Hose quick couplings
A large selection of powder hose couplings with matching powder hose offers the right solution for every application. Suitable adapters are available depending on the hose diameter.

Order number	2322761 (D10-D12)	2322768 (D8-D10)	2305866 + 2438592 (for replacement hose D10-D12)

Nozzle extensions
Very well suited for surfaces that are difficult to reach or particularly deep workpieces, such as radiators or cabinets.

Order number	2323366 (150mm)	2323356 (300mm)	2323338 (500mm)	2330497 (750mm)

Gun nozzles
Flat jet, round jet and cross slot nozzles enable high quality results for every application.
An overview of possible configurations for the PEM-X1 is available as PDF [digital].

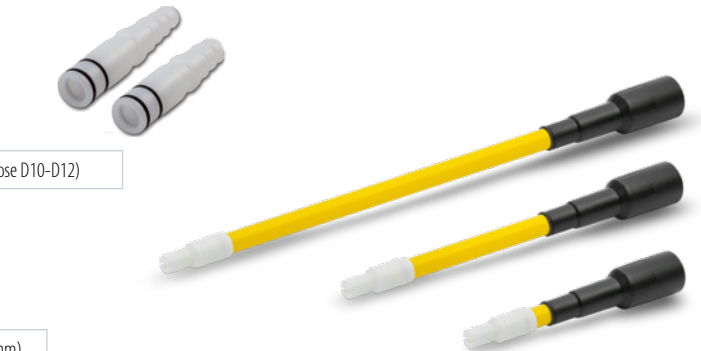### PXS collector & injector nozzle
The highest standard of injector technology also in manual coating: The use of PXS collector and injector nozzles means that the hose diameter and required air can be reduced. Even finer, more stable powder clouds can be achieved without compromising powder output.

Order number	Quick-Link	Quick-Link Hi-Coat
Collector nozzles	2357262	2368035
Injector nozzles	2366797	2368888

Extension to double system
Easy extension to a double system with a second, separate swivel arm with injector, gun and control unit, as well as the corresponding powder and air hoses.

Order number	see table above

CoronaStar
The CoronaStar reduces the orange peel effect and provides smoother surfaces. Thanks to the easy plug-in principle, this accessory can be installed quickly.

Order number	2322868 (PEM-X1, manual)	2424655 (PEA-X1, automatic)

Quick-Link Hi-Coat injector
For extremely high demands on the surface finish. Typical applications: Wheel finishing, very small parts with thin layer thicknesses, as well as in combination with the 3-liter hopper.

Order number	see table above

Cup extension
The 1-liter cup extension is an effective addition to the cup gun PEM-X1 CG and can be easily attached to the small cup. The cup gun can then be used to coat not only individual workpieces but also smaller batch sizes without the need to refill powder.

Order number	2399466 (1l cup extension)	2324139 (0.2l replacement cup)

Case set with spare parts
The spare parts case set contains all important spare and wear parts, clearly sorted and stored in a practical box. Ideal for a smooth start and long-term operation of the manual system.

Order number	2466872

WAGNER

Four aces at hand. Pick yours.

J. Wagner GmbH
Industrial Solutions   +49 7544 505 – 0
D-88677 Markdorf   info@wagner-group.com   www.wagner-group.com