OptiFlex® Pro

Boost your manual coating to a new level!

Power - Quality - Control

The new generation of OptiFlex Pro manual units impresses with additional application performance due to the outstanding PowerBoost® technology.
With OptiFlex Pro, you easily process all powder types and coat complex parts in superior quality - all this worldwide and in the most difficult industrial environments.
The use of the Electrostatic App is your first step into Smart Factory Automation and makes the manual coating process transparent.

Your global partner for high quality powder coating

Gema

Power

Maximum coating performance

The first choice in manual coating

The OptiFlex Pro manual units are uncompromisingly and agilely designed for maximum industrial suitability and worldwide use.
The intelligent and durable components fit perfectly together and form the powerful package for superior manual powder coating.
The ergonomic and intuitive operation enables every user to achieve the best coating results at any time.

PowerBoost - Safe technology for more power performance

The newly developed PowerBoost technology of the OptiFlex Pro series offers with the 110 kV the highest powder charging capacity in the powder coating industry while complying with safety regulations. The operator benefits from an outstanding coating performance.
The new feature completes the proven high-voltage functionalities, such as PCC mode, presettings and individual coating programs and extends the application range significantly.

OptiSelect® Pro - highest industrial suitability

- The new OptiSelect Pro gun features a particularly robust and durable design. The ergonomic and light-weight gun is well-balanced in the hand, has a good grip and enables you to coat efficiently and faster.
- The new PowerBoost high-performance technology charges all types of powder even more efficiently. The benefits of the additional power provide higher productivity, faster conveying speeds and maximum area performance.
- The integrated remote control allows easily to activate the PowerBoost powder charging mode and to regulate the powder output right away.
- The integrated cleaning of the powder conveying components can be enhanced by the optional PowerClean module, which ensures a faster and efficient cleaning. This improves performance when processing difficult powders and facilitates color change.
- The latest generation of nozzles ensures an excellent powder distribution and penetration.

Best application results

Quality

Be one step ahead of the competition!

With OptiFlex Pro you coat extremely efficiently and with consistently high quality.

The Precise Charge Control (PCC) mode regulates the spray current even in the lowest ampere ranges (0–10 µA) with the highest accuracy. This prevents overcharging of even the most demanding powders such as metallic powder and ensures the highest quality in thick film and multi-layer applications and recess areas.

The Digital Valve Control (DVC) technology allows an exact and repeatable adjustment of the powder output and ensures an uniform layer thickness.

OptiFlow injector - for repeatable quality

The new OptiFlow injector with cartridge design further optimises the venturi principle in terms of transport efficiency and low wear.
By simply exchanging the one-piece cartridge, the injector performance is optimally maintained.
The usage of fewer parts and the seamless Inline Design of the injector improves the ability for fast color change.

Main features OptiFlow injector

- Cartridge design merges injector nozzle and conveying insert into a single component
- Powder outputs of up to 450 g/min achievable depending upon hose length and diameter
- Quick release design for the powder hose
- Unique Inline Design
- Cartridge sleeve manufactured from high quality non stick materials
- Robust diecast injector housing
- Quick disconnect air connections

The OptiFlow injector with Inline Design ensures precise and uniform powder delivery to the gun.

Control

Master the application!

Electrostatic App (Gema E-App)

The new features of OptiFlex Pro also give you a technological edge. The Electrostatic App (E-App) with the integrated line management functions and additional service features make the coating process transparent and better controllable.
Important data of your application are always at hand and can be easily exported for further usage.

Gema E-App Functions

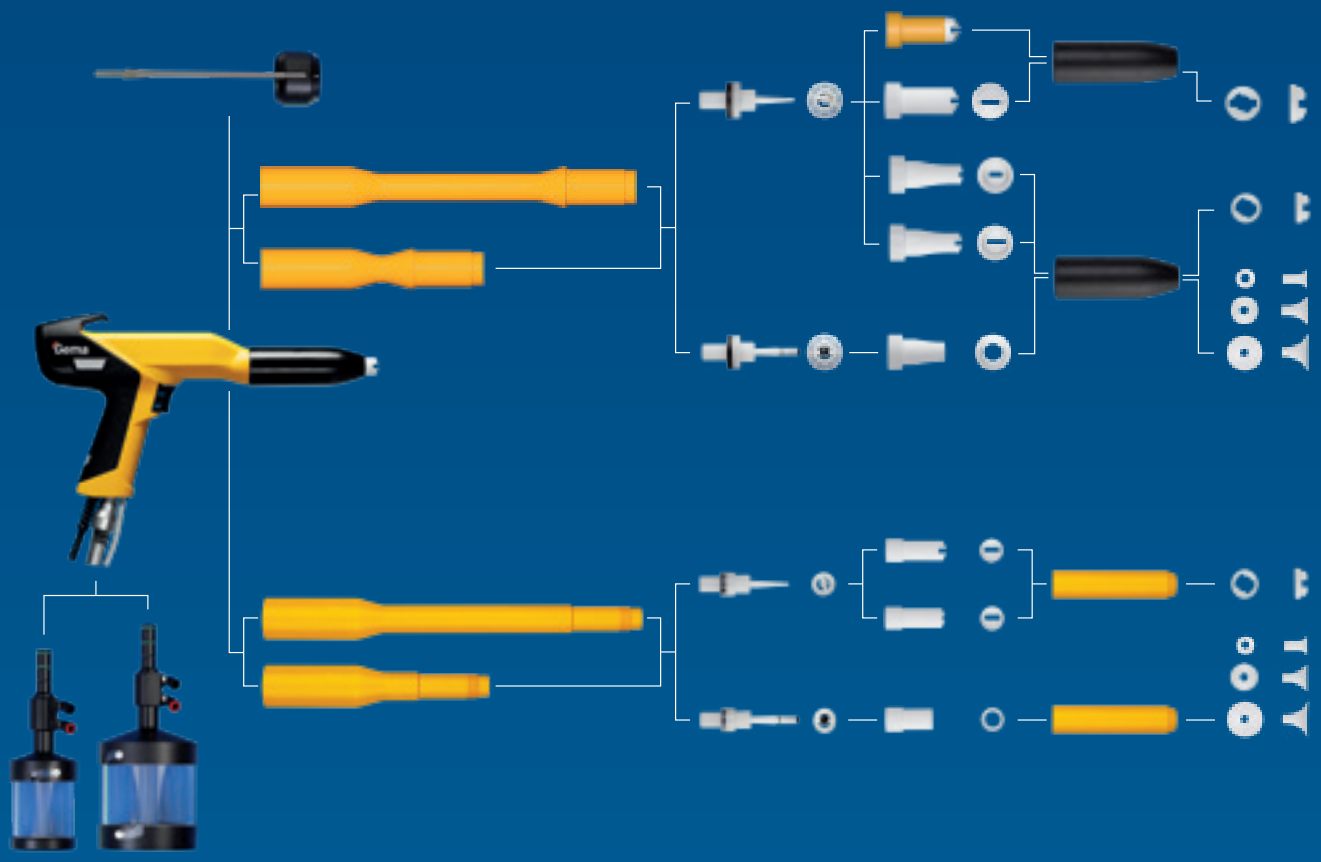
- Application: Adjustment and control of coating parameters
- Line Management: Review of productivity and maintenance data
- Setup: OptiStar® configuration and system information
- Service: Access to user manuals and Gema website

The OptiStar 4.0 control unit precisely controls and monitors all pneumatic and electrostatic parameters of the application.

OptiStar 4.0 - the benchmark for gun controls

- The PowerBoost technology offers maximum coating performance over the entire working area through highly efficient charging of the powder particles. This achieves higher productivity, faster conveying speeds and maximum area performance.
- Precise Charge Control (PCC) Mode for high-quality coating tasks
- Three standard programs (flat parts, profiles and re-coating) make the coating easy for beginners.
- The intuitive display makes it easy for any user to set and program the optimal parameters. The result is a perfect coating quality that can be reproduced at any time.
- Digital Valve Control (DVC) Technology for precise powder delivery
- Electrostatic App (E-App) for transparency of the coating

Accessories OptiSelect Pro



Nozzle Assortment

Flat- and round jet nozzles for all applications to ensure the optimal spray pattern for the object. The nozzle range is characterized by:

- Optimal powder cloud creation
- Elimination of powder spitting
- Low wear characteristics
- Quick color change
- Uncompromising use of material
- No powder deposits
- Seamless design

SuperCorona

The optional SuperCorona extension:

- Neutralizes the free ions
- Reduces orange peel effect (back ionisation), where thicker coatings are required
- Reduces the picture frame effect

Increase the productivity!

OptiFlex Pro B, Q, F and S are available with double gun versions.

Versatile model range for all requirements

OptiFlex Pro B

OptiFlex Pro Q

For frequent color change

If your production requires frequent and quick color change, then we would recommend the OptiFlex Pro B, which is designed to use the manufacturer's original powder box.

- Highest flexibility
- Shortest and cleanest color change
- For direct transport from the original powder box
- Complete emptying of the powder box thanks to the tilted vibrating base
- Integrated fluidization
- Scratch resistant and easy accessible box plate

Color change in 35 seconds

Are super-fast color change your priority? OptiFlex Pro Q is equipped with additional features that allow:

- Super-fast color change in 30-40 seconds
- Suitable for all types of powder
- Minimal space usage

OptiFlex Pro F

OptiFlex Pro S

For continuous powder use

If continuous use of the same powder over a long period of time is the bulk of your production schedule, then we would recommend the OptiFlex Pro F with the 50 l fluidized powder container.

- Ideal for large powder quantities
- Compatible with all powder types
- Scratch-free 50 l powder container with fluidization
- Easy cleaning of the container

For powders that are difficult to fluidize

Do you need to economically process powders with a tendency to separation during fluidization? OptiFlex Pro S is your best choice!

- Unique stirrer system with 18 l hopper capacity
- Processing of powders with poor fluidization capability
- Preventing the separation of powders
- Processing of small quantities without any loss
- Complete emptying of remaining powder

OptiFlex Pro C

OptiFlex Pro CF

For Lab use

Do you want to coat small batches or samples? Your solution is the OptiFlex Pro C with self-fluidizing application cup.

- Perfectly suited for small powder quantities
- Self-fluidizing application cup (optionally 150 ml or 500 ml)
- Processes powder quantities from 20 – 250 g/min
- The application cup can be easily combined with every coating unit

For Lab use

Do you want to coat small batches or samples? Your solution is the OptiFlex Pro CF with funnel cup.

- Perfectly suited for small powder quantities
- Reproducible coating results
- Simple and reliable color change in 20 seconds
- Visual inspection of all powder transporting components
- Robust and durable industrial design
- Removeable funnel cup with 300 ml or 600 ml

OptiFlex Pro L

OptiFlex Pro W

For small batches

Do you carry out lab applications or quality tests? The OptiFlex Pro L unit is the perfect solution for lab use and quality control.

- Fluidizised powder hopper
- 4 l hopper volume
- Removable powder hopper
- Easy cleaning

The universal solution

For upgrades, to be mounted on booth walls or at your production site: OptiFlex Pro W can be integrated in any existing surrounding.

- Its bracket can be mounted on any powder booth
- Takes the powder from fluidized hoppers or original powder box

Technical data OptiFlex Pro models

	OptiFlex® Pro B	OptiFlex® Pro Q	OptiFlex® Pro F	OptiFlex® Pro S
Electrical data				
Nominal input voltage	100 – 240 VAC	100 – 240 VAC	100 – 240 VAC	100 – 240 VAC
Frequency	50 – 60 Hz	50 – 60 Hz	50 – 60 Hz	50 – 60 Hz
Temperature range	5 °C – +40 °C 41 °F – +104 °F	5 °C – +40 °C 41 °F – +104 °F	5 °C – +40 °C 41 °F – +104 °F	5 °C – +40 °C 41 °F – +104 °F
Pneumatic data				
Max. manual unit input pressure Input pressure OptiStar	10 bar / 145 psi 5.5 bar / 80 psi	10 bar / 145 psi 5.5 bar / 80 psi	10 bar / 145 psi 5.5 bar / 80 psi	10 bar / 145 psi 5.5 bar / 80 psi
Max. water vapor content of compressed air Max. oil vapor content of compressed air	1.3 g/m³ 0.1 mg/m³	1.3 g/m³ 0.1 mg/m³	1.3 g/m³ 0.1 mg/m³	1.3 g/m³ 0.1 mg/m³
Dimensions				
Compressed air consumption normal operation	5.5 Nm³/h	5.5 Nm³/h (for a short time during cleaning cycle 30 Nm³/h)	7.5 Nm³/h	5.5 Nm³/h
Hopper volume	–	–	50 l	18 l

	OptiSelect Pro Type GM04	OptiStar 4.0 Type CG21	OptiFlex Pro Manual coating equipment
Approvals			
	CE0102 Ex II 2 D PTB 19 ATEX 5001	CE0102 Ex II 3 (2) D PTB 17 ATEX 5002	CE Ex II 3 D IP54 120 °C

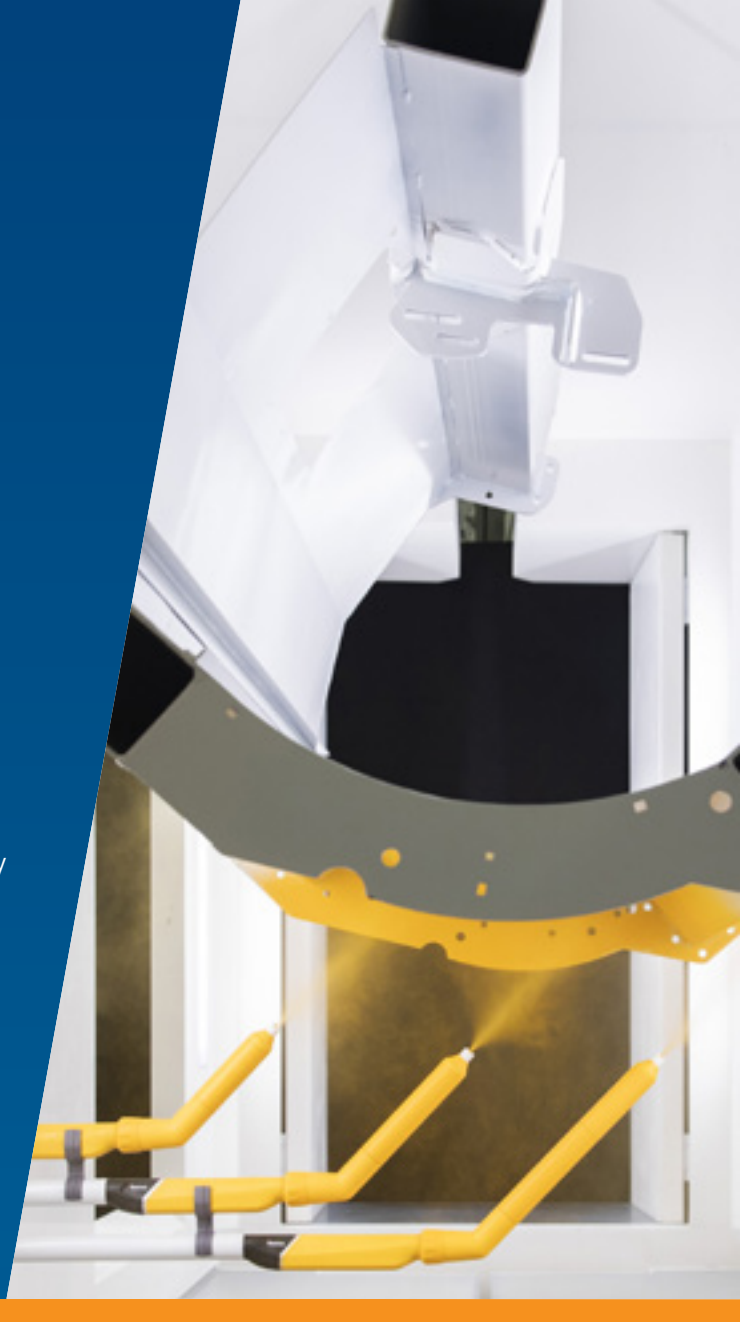
	OptiFlex® Pro C	OptiFlex® Pro CF	OptiFlex® Pro L	OptiFlex® Pro W
Electrical data				
Nominal input voltage	100 – 240 VAC	100 – 240 VAC	100 – 240 VAC	100 – 240 VAC
Frequency	50 – 60 Hz	50 – 60 Hz	50 – 60 Hz	50 – 60 Hz
Temperature range	5 °C – +40 °C 41 °F – +104 °F	5 °C – +40 °C 41 °F – +104 °F	5 °C – +40 °C 41 °F – +104 °F	5 °C – +40 °C 41 °F – +104 °F
Pneumatic data				
Max. manual unit input pressure Input pressure OptiStar	10 bar / 145 psi 5.5 bar / 80 psi	10 bar / 145 psi 5.5 bar / 80 psi	10 bar / 145 psi 5.5 bar / 80 psi	10 bar / 145 psi 5.5 bar / 80 psi
Max. water vapor content of compressed air Max. oil vapor content of compressed air	1.3 g/m³ 0.1 mg/m³	1.3 g/m³ 0.1 mg/m³	1.3 g/m³ 0.1 mg/m³	1.3 g/m³ 0.1 mg/m³
Dimensions				
Compressed air consumption normal operation	5.0 Nm³/h	3.0 Nm³/h	5.5 Nm³/h	5.5 Nm³/h
Powder container type Volume	Application Cup 500 ml optional 150 ml	Application Funnel 300 ml or 600 ml	Powder Hopper 4 l	–

Gema Switzerland

Your global partner for high quality powder coating

Take advantage of our expertise and experience from more than 50 years of electrostatic powder coating applications. From simple hand coating through to fully automated powder coating, we offer solutions that meet the demands and requirements of customers around the world in a wide range of industrial sectors. A global service network ensures you always get professional support, at any time and any place!

Gema is part of Graco Inc. Our goal is to help our customers to increase their productivity while creating attractive, long-lasting products. Our experts continually set new standards in the surface coating industry.



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