

OptiCenter® All-in-One

The first powder centre combining electrostatics and powder feeding



Integrated solution for all powder management needs

Your solution for efficient and space-saving powder management is OptiCenter All-in-One. The system is equipped with the latest generation of OptiStar All-in-One gun controls and guarantees the fastest powder output response times for reliable coating quality. The fully automated application and cleaning process ensures efficient color changes with simple and intuitive operator guidance.

Your global partner for high quality powder coating



Outstanding application performance



OptiSpeeder

Efficient and flexible color changes

The heart of the OptiCenter All-in-One is the OptiSpeeder powder hopper, which optimally conditions the powder by fluidization. The new OptiSpeeder has a large inclined opening, which allows a quick and easy access and insight into the interior of the powder container. The short suction distances are designed for an even powder flow and best coating results!

The closed powder circuit is controlled fully automatically and ensures a clean working environment as well as measurably greater efficiency.



OptiSpeeder with OptiStar All-in-One

The OptiSpeeder is equipped with a powder level detection and automatic fresh powder feed, which guarantee a constantly available powder quantity.

The switching from fresh powder to recovery operation and cleaning mode is fully automatic.



Integrated OptiStar All-in-One

Individual cleaning efficiency

With the fully automatic cleaning of the powder hopper and all powder-carrying components, you achieve the highest cleaning efficiency! The user can apply the cleaning modes individually:

- Quality Mode: cleaning program for contrasting colours and highest cleaning demands
- Fast Mode: quick cleaning program for color changes within the same color spectrum
- Custom Mode: user-specific color change programs

Variable powder level detection

The integrated stepless level control detects the powder level in the powder hopper and shows it on the display at any time, maintaining application consistency perfectly. Even small powder quantities are detected and allow the coating of small production batches.

Reliable coating quality

Fastest reaction times due to integrated control technology

The OptiStar All-in-One controls are directly integrated into the OptiSpeeder. The OptiStar All-in-One controls all coating parameters and also the powder flow through the integrated injector technology.

The integrated OptiFlow injector technology is characterized by extreme longevity and stable application results. Fastest trigger times of the powder output allow a delay-free control of the powder cloud and a qualitative improvement of the coating.

Bi-directional cleaning to the gun and to the powder hopper ensures highly efficient cleaning performance.

Due to the extremely compact arrangement of the OptiStar All-in-One, up to 36 guns can be supplied with powder from one OptiSpeeder!



OptiStar All-in-One

OptiStar All-in-One®: Reliable results over the long term time periods

The OptiStar All-in-One control unit is the key to achieving accurate and reproducible coating results:

- Compactest design for space-saving integration with shortest powder suction distances
- Integrated one-piece OptiFlow Injector
 - Cartridge merges injector nozzle and conveying insert into a single component
 - Quick release design for the powder hose
- Digital Valve Control (DVC) for precise powder output control
- Precision Charge Control (PCC) guarantees exact current control below 10 μA in 0.5 increments. This prevents overcharging of challenging powders.
- CAN bus technology for horizontal integration into the higher-level plant control system



OptiFlow Injector

The OptiFlow IG08 is horizontally integrated directly into the OptiStar All-in-One control unit. This eliminates the pneumatic lines between the injector and control unit and ensures greater cleaning efficiency and faster powder output response.



Trendsetting and intuitive



OptiControl powder management control

Easy operation and programming

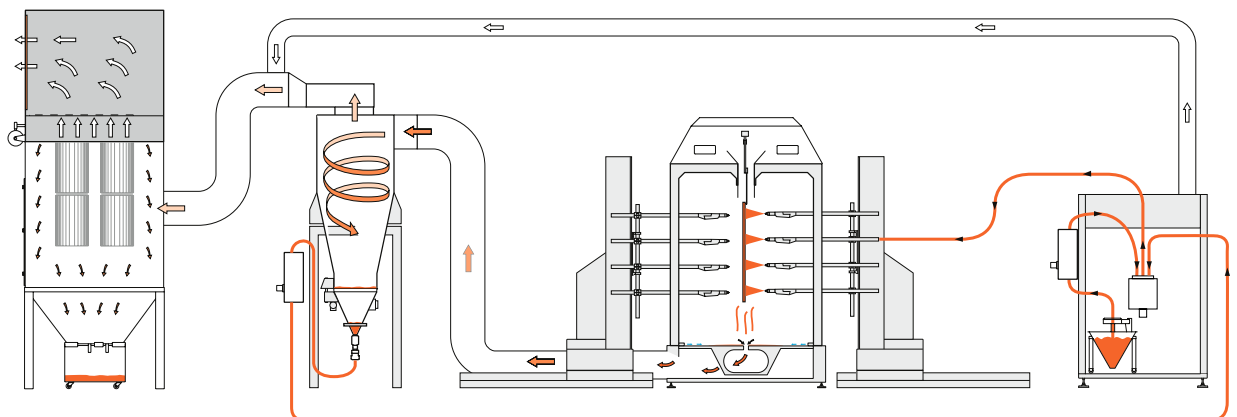
The operation of the OptiCenter is particularly intuitive and takes place via the 7" touch screen of the integrated OptiControl control unit.

The OptiControl control unit has the following highlights:

- Clear user interface: Easy operation of the coating and color change process
- Coating process: Automatic and programmable changeover time from fresh powder to recovery operation
- Minimum Fresh Powder Ratio Control: Quality increase for coating in recovery operation through controlled additional fresh powder supply
- Programmable powder level for standard and small series coating
- Selection of the cleaning programs: Quality Mode for deep cleaning, Fast Mode for quick cleaning and Custom Mode for user-specific color change programs

Closed loop and efficient powder circuit

The powder circuit guarantees a continuous and consistent powder feed with minimal wear and tear on parts. The OptiCenter, injectors, powder pumps and recovery system are all ideally matched to each other and ensure perfect working conditions. With a fresh powder feed and sieving solution, the most demanding quality requirements and expectations can be met.



Compact design and flexible configuration

Space-saving design

The OptiCenter All-in-One has a very compact design and can be flexibly adapted to any system layout, as no gun control cabinet is required. The result is not only space-saving, but also ergonomic solutions that can be installed in a minimum of time.



OptiCenter All-in-One

Gentle powder recovery

The powder recovery system is based on the proven OptiFeed powder pumps from Gema. These pumps convey the powder gently to the OptiSpeeder. The OptiFeed pumps do not have any moving parts and therefore require only minimum maintenance.

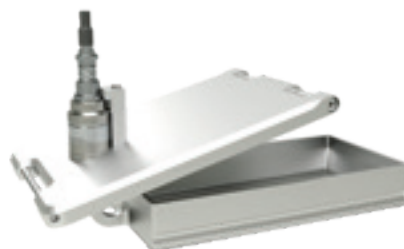


OptiFeed powder pump

A variety of configurations

The OptiCenter All-in-One can be equipped flexibly according to your individual demands. The equipment variants include the following:

- Ultrasonic sieve insert US07: The free-swinging sieve surface ensures loss-free energy coupling for ultrasonic sieving and enables efficient sieving performance.
- Variants of the internal fresh powder feed:
 - Cone (standard)
 - Vibrating table for powder box
 - Powder Hopper (50l/100l volume)
- External fresh powder supply with OptiFeed FPS16 BigBag





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OptiCenter All-in-One

Excellent Coating Results

- Short suction distances
- Fastest trigger times
- Variable powder level detection
- Continuous supply of fresh and recycled powder
- Integrated ultrasonic sieve solution

Quick Color Change

- Closed powder circuit
- Fully-automated cleaning process
- Fully automatic switching from fresh powder to recovery operation

Compact Design

- Space-saving system integration (no control cabinet)

Ergonomic and intuitive Interface

Easy Maintenance

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OptiSpeeder

- Closed powder hopper
- Generous access to the powder hopper
- Versions: 24 / 36 integrated OptiStar All-in-One control units
- Constant powder level
- Short suction distances

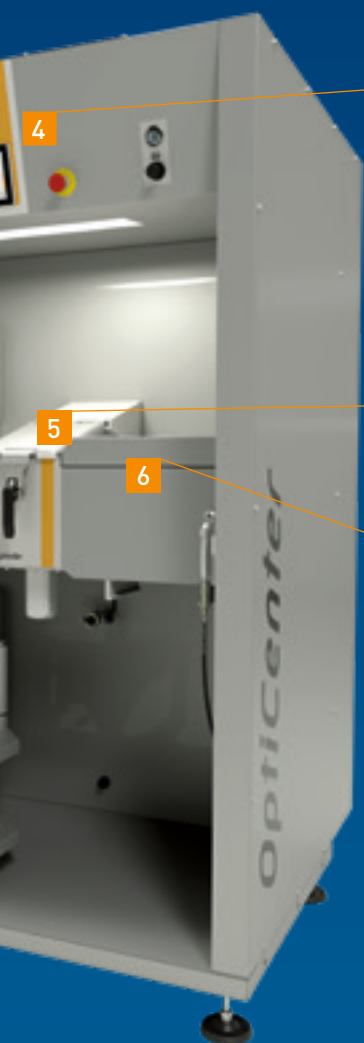
Cleaning

- Automatic cleaning of powder hopper
- Automatic cleaning of the suction tubes, powder hoses and guns
- Automatic cleaning of the fresh powder and recovery pump and hoses

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Compact Integration

- Extremely space-saving integration of the OptiStar All-in-One controls directly into the powder hopper
- Fastest reaction times (powder on/off) due to the elimination of all pneumatic lines between control and injector
- Up to 36 guns can be supplied from one powder hopper thanks to the compact arrangement of the controls
- Completely pre-assembled system, ready for operation



4 OptiControl

- Programmable changeover time from fresh powder to recovery operation
- Minimum Fresh Powder Ratio Control
- Programmable powder level
- Cleaning programs: Quality, Fast and Custom mode

5 Ultrasonic Sieve

- Sieving of recycled and fresh powder
- Free-swinging sieve surface for maximum sieving performance
- Different mesh sizes available
- Extremely gentle sieving

6 OptiStar All-in-One

- Direct integration of injector OptiFlow IG08 into control unit
- No pneumatic lines between control unit and injector
- Fastest trigger times of the powder output
- Highest cleaning efficiency
- Precise powder output control by Digital Valve Control (DVC)
- Exact current settings under 10 μA in 0.5 μA increments by Precision Charge Control (PCC)
- CAN bus technology for horizontal integration into the higher-level plant control system

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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