OptiCenter® All-in-One (OC11)

Double your efficiency!



The OptiCenter All-in-One (OC11) powder management center combines OptiSpray All-in-One application pump technology for unrivaled control of the application and powder handling process coupled with the fastest color change capability. The system with double OptiSpeeder powder hoppers (DualSpeeder) enables handling and preparation of two independent colors sequentially for ultra-fast color change or in parallel for simultaneous coating from both OptiSpeeder hoppers. Both resulting in the highest levels of production flexibility and efficiency.



Handle two colors in parallel



Operation with two independent OptiSpeeders (DualSpeeder) allows fastest exchange from one color to another, providing enough time to prepare one powder hopper for the next color while the other powder hopper is in operation.

Any powder, any color, any time

OptiCenter All-in-One is equipped with DualSpeeder technology (2 powder hoppers) which can be operated in a sequential or parallel operating mode.

The sequential operation enables the handling and color change operation of two different colors in a parallel process. This enables color changes to take place in as little as 60 seconds, providing color flexibility and operating efficiency with short batch production.

In parallel operation the system allows the coating with fresh and recovery powder to be applied simultaneously but independently of each other. For "A" class surfaces fresh powder is applied from one OptiSpeeder whilst recovery powder is utilized for less visual surfaces from the other OptiSpeeder. This optimises coating quality and ensures maximum powder utilization.

Additionally, in parallel operation where a high quantity of spray guns are utilized, powder feed can be provisioned from both hoppers maximizing capacity. Alternatively, the OptiSpeeder hopper can be switched in operation, operating as a dual fresh powder source.



MultiColor Switch

MultiColor Switch technology

The unique MultiColor Switch provides the fastest switching between the OptiSpeeder hoppers and alternate colors for the fastest and cleanest color change in one seamless operation.

The technology further provides a unique opportunity to group guns independently across the DualSpeeder powder hoppers. Consequently, each OptiSpeeder can be operated separately and simultaneously. In parallel operation mode, both hoppers act as a double fresh powder source, thus reducing handling time of powder boxes and increasing productivity.

Individual cleaning efficiency

AirWave Technology provides fully automatic cleaning of the powder hopper and all powder-carrying components, thus achieving the highest cleaning efficiency!

The user can apply the cleaning modes individually:

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

Fusion of electrostatics and dense phase powder delivery

Precise and reproducible coating results

OptiSpray All-in-One is the first unit in the powder coating industry that integrates electrostatics and dense phase powder feed via pump technology in one compact device.

This leads to a perfect interaction of the pneumatic and electrostatic functions of the application and ensures the most responsive powder feed from the powder hopper to the gun, instant activation of the powder cloud and highest transfer efficiency.

The device incorporates Gema's proven powder feeding and electrostatic technologies to ensure precise powder flow, providing optimal and constant applications results.



OptiSpray All-in-One

All-in-One device - unique and patented product design

- Latest generation of Gema dense-phase technology: Smart Inline Technology (SIT) for linear and reproducible powder output
- Straight path design ensures highest cleaning efficiency due to shortest powder suction distances and bidirectional cleaning
- Precise Charge Control (PCC) for precise current control below 10 μA for special powders and application requirements
- Gema electrostatic technology: PowerBoost® providing 110 kV for maximum powder charging capacity
- Digital Valve Control (DVC) for precise powder output control
- Individual coating programs to cover all coating demands
- Bi-directional interface for connection to system control and production data monitoring, with MagicControl 4.0 master control and GemaConnect[®] for advanced system monitoring dashboard



Trendsetting and intuitive





OptiControl powder management control

Easy operation and programming

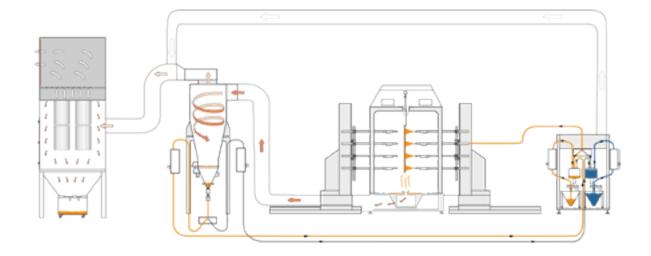
The operation of the OptiCenter All-in-One is particularly intuitive and takes place via the 7" touch screen of the integrated OptiControl control unit.

The OptiControl control unit has the following highlights:

- Intuitive user interface: Easy operation of the coating and color change process
- Selection of the coating mode: Sequential operation with separately operated OptiSpeeders for fastest color changes; Parallel operation with independent but simultaneous operation with two powder sources.
- Coating process: Programmable and user defined timer for the switch from fresh powder to full recovery operation.
- Control for minimum fresh powder consumption: Quality increase for coating in recovery operation through controlled additional fresh powder supply
- 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 components. The OptiCenter, application and powder pumps as well as recovery system are all ideally matched to each another and ensure perfect operating 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 comes with a compact design as no cabinet is required; it can be flexibly adapted to any system layout, with installation times reduced to a minimum. The result is not only spacesaving, but also an ergonomic solution.

Gentle powder transportation

The fresh and recovery powder systems are based on the proven OptiFeed powder pumps from Gema. These pumps gently convey the powder ensuring constant powder quality and smooth delivery at both OptiSpeeders. The OptiFeed pumps with the absence of mechanically moving components provide a high performance, low maintenance pump.



OptiCenter All-in-One (OC11)



OptiFeed powder pump

A variety of configurations

The OptiCenter All-in-One can be equipped flexibly according to individual production, process and quality demands. The equipment variants include:

- Ultrasonic sieve insert US07: The sieve insert with reduced micron mesh size, ensure the highest ultrasonic sieving performance for both fresh and recovery powder optimizing coating quality.
- Variants of the internal fresh powder feed:
 - Cone (standard)
 - Cone with weighing system for powder consumption measurement: The fresh powder in the cone is weighed and processed in the batch management system of the MagicControl 4.0.
 - Vibrating table for powder box
- External fresh powder supply with OptiFeed FPS series



Ultrasonic sieve insert US07









OptiCenter All-in-One OC11

Excellent Coating Results

- Sequential or parallel operation of the DualSpeeder
- Continuous supply of fresh and recycled powder
- Integrated ultrasonic sieve solution

Quick Color Change

- Closed loop powder circuit
- Fully-automated cleaning process with AirWave Technology
- Fully automatic switching between alternate colors

Compact Design

 Space-saving system integration (no control cabinet)

Ergonomic and intuitive Interface

Simple maintenance procedures

OptiSpeeder

- Two sealed powder hoppers (DualSpeeder)
- Easy viewing access to the hopper internal area
- Version: up to 36 integrated application pumps
- Constant powder level control

Cleaning

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

Pump Integration

 Space-saving pump integration for easy access and maintenance

OptiCenter All-in-One

- Easy accessible pumps behind a sliding cover
- Dust-free and user-friendly operation
- Completely pre-assembled system, ready for operation







OptiControl

- User defined timer for the switch from fresh powder to full recovery operation
- Coating modes: sequential or parallel operation
- Blending of fresh and recovered powder ensures minimum powder consumption
- Cleaning programs: Quality, Fast and Custom Mode

OptiSpray All-in-One

- Merged electrostatics and powder feed in one unit
- SIT concept (Smart Inline Technology) with single chamber
- Automatic wear part diagnostic
- Compact design for a perfect system integration
- Stable application quality over long time
- Automatic cleaning program for color change
- Accurate and repeatable powder output settings
- PCC (Precise Charge Control) for exact current control below 10 µA in 0.5 increments
- PowerBoost for or maximum powder charging capacity
- CAN-Bus for communication with superior control system

Quick and easy maintenance procedure requiring no tools

MultiColor Switch

- Enables the powder hoppers of the DualSpeeder to be operated both separately and simultaneously
- Unique design enables separate and independent handling and operation for ultra fast color change between two colors; in parallel operation for optimized powder utilization and performance
- Enables processing of application and color change between two different colors independently and simultaneously.
- Groups guns independently across the powder hoppers of the DualSpeeder

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!

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