OptiStar All-in-One®

Electrostatics and powder feed in one compact device

Fastest response behaviour for highest coating efficiency

The OptiStar All-in-One is the first control unit in the powder coating industry to combine electrostatics and powder feed via injector in an very compact device.

The new design eliminates all pneumatic lines between injector and control unit and enables space-saving system integration into the powder management center.

This guarantees the highest cleaning efficiency as well as fastest response times of the powder output for a delay-free control of the powder cloud.
Fusion of electrostatics and powder transport

Benefits OptiStar All-in-One at a glance

Best coating results due to fastest response times
The OptiStar All-in-One combines gun control and powder feed in a single compact unit.

Direct integration of the injector into the OptiStar eliminates the need for pneumatic lines between the injector and the control system. This results in a constant powder flow for optimum coating results.

A delay-free and thus exact control of the powder cloud is achieved by the shortest reaction times to powder quantity adjustments. The rapid switching on/off of the powder feed also reduces powder consumption.

OptiFlow Injector
The OptiFlow IG08 is horizontally integrated into the OptiStar All-in-One control integrated. The unique one-component cartridge design of the injector reduces wear consumption, ensures a constant powder flow over the long term and enables even faster replacement of wear parts.

Main features OptiStar All-in-One
- Compactest design for space-saving integration with shortest powder suction distances
- Integrated one-piece OptiFlow injector
- Digital Valve Control (DVC) for precise powder output control
- Precise 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

Main features OptiFlow injector
- Innovative cartridge design merges injector nozzle and conveying insert into a single component and enables a consistent powder output
- Consistent powder flow for uniform film thickness
- «Plug & Convey» function for quick color change and cleaning by removing powder hose and cartridge in one easy step
- Unique Inline Design
- Use of non-adhesive materials for the cartridge
Highest cleaning performance
With the All-in-One control, you achieve a fast and highly efficient cleaning performance.
With direction-controlled cleaning to the gun and to the powder hopper, the highest amount of air is introduced to release the full cleaning energy.

Compact control design
The OptiStar All-in-One control unit features a slim design that enables compact, space-saving integration into the powder hopper of the OptiCenter All-in-One.

Powder flow under control
Powder Flow Detection detects irregularities in the powder flow which can lead to conveying problems and reports this to the plant control system in good time.

Centralised Power
1. The OptiStar All-in-One precisely monitors and controls all pneumatic and electrostatic parameters of the application.
2. The directly integrated OptiFlow injector precisely conveys the powder from the powder hopper to the gun.
3. The OptiGun guns offer highest transfer efficiency and perfect coating quality.
Gema Switzerland

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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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