OptiFeed 4.0

Connect - Transfer - Control

Smart powder transfer solution

OptiFeed 4.0 is the enhanced bulk powder feed pump with «Plug & Convey» functionality.
This digitally controlled pump may be quickly integrated into the coating system for either new or existing lines or used as stand-alone product.
Depending on the application, the communication with the pump is from a master control system or directly on the pump's integrated display.

Your global partner for high quality powder coating

Gema

Connect

Quick and easy integration

OptiFeed 4.0

«Plug & Convey»
The OptiFeed 4.0 powder transfer pump can be easily integrated into a fully automated coating system for either new or existing lines. The powder pump as a part of a coating system is connected to a CAN-Bus network. OptiFeed 4.0 is the ideal solution for complete systems, retrofits or to upgrade existing bulk delivery pumps.

OptiFeed 4.0 as a stand-alone dense-phase pump is a simple and quick solution to replace less reliable bulk venturi pumps.

The preset parameters of the pump facilitate commissioning and allow immediate use of the full performance.

CAN-Bus technology for seemless integration into master control systems

LCD mini touch display provides high level operational and service details when used as a stand-alone pump.

Reliable mass powder transport

Mass powder transport over long distances

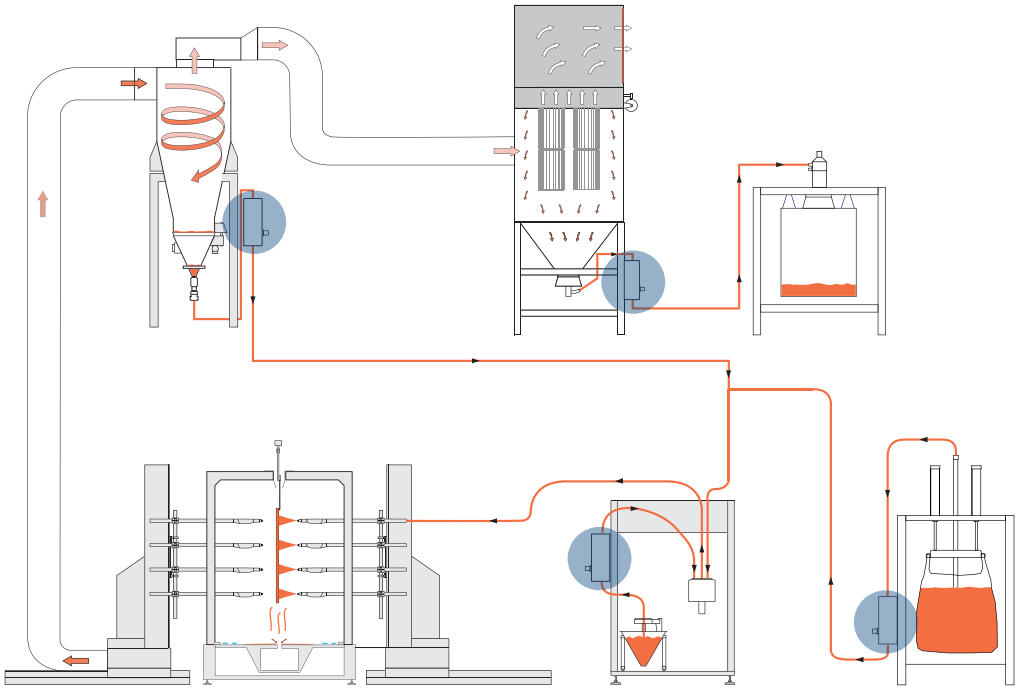
OptiFeed 4.0 provides a highly reliable and efficient mass powder transfer. The proven dense-phase pump technology achieves with minimal conveying air a consistent powder transfer of up to 6 kg/min with feeding distances of up to 30 meters.
Engineered to handle all materials, the optimized powder path is suitable for organic, metallic and enamel powders.
Whether the OptiFeed 4.0 is used for fresh feed or recovery powder, the powder will be gently transferred to the powder hopper.

Optimized color change without cross contamination

OptiFeed 4.0 provides contamination-free, fast color change regardless of the material being transferred.

High cleaning efficiency for optimized color change

The bi-directional cleaning of the pump and the powder hoses ensures an optimal cleaning performance for any powder during every color change.



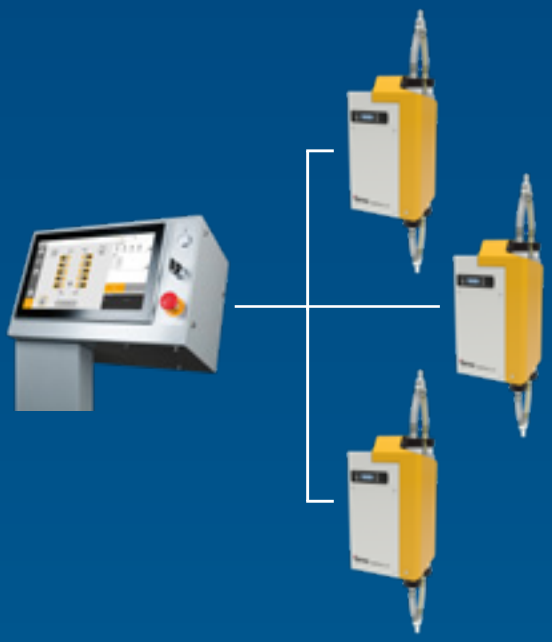
OptiFeed 4.0 is especially suited for mass powder transport over long distances directly from the powder source (fresh powder container, box, powder collector, cyclone or after filter).

High connectivity performance

Keep control of your powder delivery

OptiFeed 4.0 provides excellent oversight and control for virgin and reclaim powder transfer. When connected to a CAN-Bus network, the bi-directional communication with the master control system provides full control of the pump performance. Connectivity allows fast, reliable system set-up and grants access to each pump's data from one central location to monitor key metrics, operational feedback and wear life status.

This makes the OptiFeed 4.0 the ideal powder feed system for Industry 4.0.



Connectivity of OptiFeed 4.0 allows single point monitoring of all the bulk pumps in your system network.

Maintenance system with integrated sensors for reliable performance

The integrated sensors provide monitoring and diagnostic operational confidence. The advanced monitoring, diagnostic and maintenance features include:

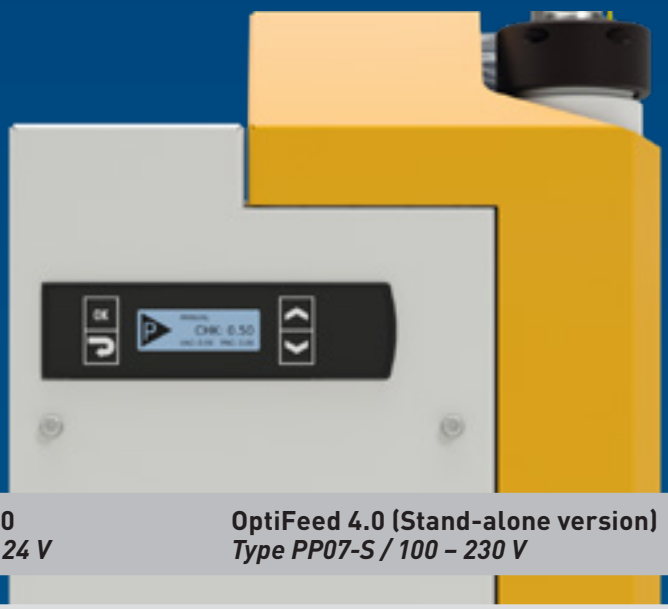
- Pinch valve (check seal and digital pressure setting)
- Powder chamber (check powder flow and back pressure)
- Pump life cycle (pump cycles, valve cycles)

The sensors provide real time feedback of pump performance and component maintenance needed to ensure a consistent, reliable powder transport and minimize downtime.

When service is required, the quick disconnect access to critical components allows fast removal, inspection or replacement without removing the entire pump.

Easy access for quick pinch valves release

Technical Data



	OptiFeed 4.0 *Type PP07 / 24 V*	OptiFeed 4.0 (Stand-alone version) *Type PP07-S / 100 – 230 V*
Powder output		
Hose length up to 8 m	6 kg/min	6 kg/min
Hose length 8 – 16 m	4.5 kg/min	4.5 kg/min
Hose length 16 – 25 m	4 kg/min	4 kg/min
Usable powders	Organic Inorganic (Enamel)	Organic Inorganic (Enamel)
Pneumatic data		
Main compressed air connection	Plug connection	Plug connection
Max. inlet pressure	8 bar	8 bar
Min. inlet pressure	6 bar	6 bar
Max. vapor content of the compressed air	1.3 g/m³	1.3 g/m³
Max. oil vapor content of compressed air	0.1 mg/m³	0.1 mg/m³
Max. air consumption while conveying	12 Nm³/h	12 Nm³/h
Pump dimensions		
Width	250 mm	250 mm
Depth	175 mm	175 mm
Height	ca. 890 mm	ca. 890 mm
Weight	14 kg	14 kg
Electrical data		
Rated input voltage	24 VDC	–
Connected load	20 W	–
Rated input voltage (with vibrator operation)	–	100 – 240 VAC ± 10 %
Frequency	–	50 Hz/60 Hz
Performance	–	20 VA
Connected load AUX	–	100 VA
Connections		
PLC	Yes	–
CAN-Bus	Yes	–
Analog OUT (signal powder flow detection)	Yes	–
Level sensor	–	Yes
Vibrator	–	Yes
IP proctection class	IP54	IP54
Temperature class	85 °C	85 °C
Temperature range	10 °C – +40 °C 32 °F – +104 °F	10 °C – +40 °C 32 °F – +104 °F
Approvals	CE Ex II 3 D	CE Ex II 3 D

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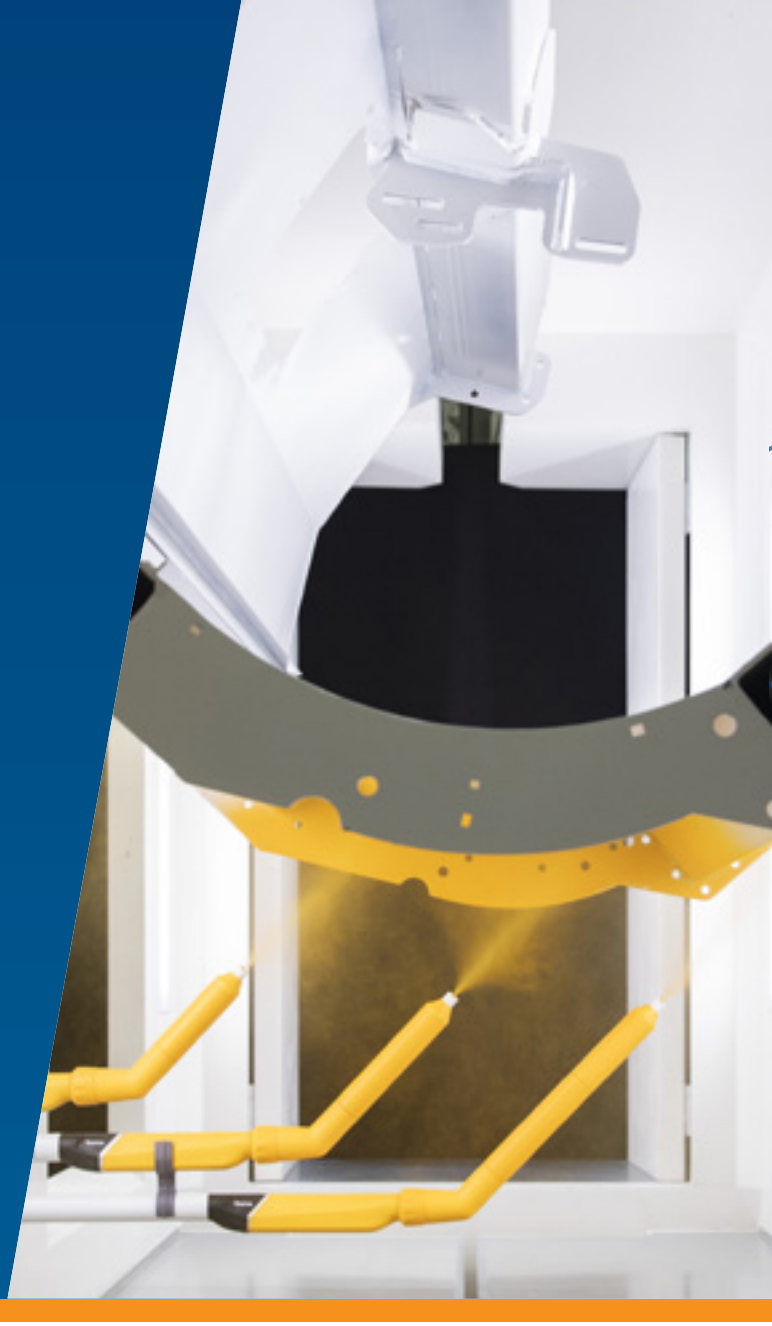

Take advantage of our expertise and experience from more than 50 years of electrostatic powder coating applications. From simple hand coating through to fully automated powder coating, we offer solutions that meet the demands and requirements of customers around the world in a wide range of industrial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

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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