

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 seamless integration into master control systems



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

Transfer

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.

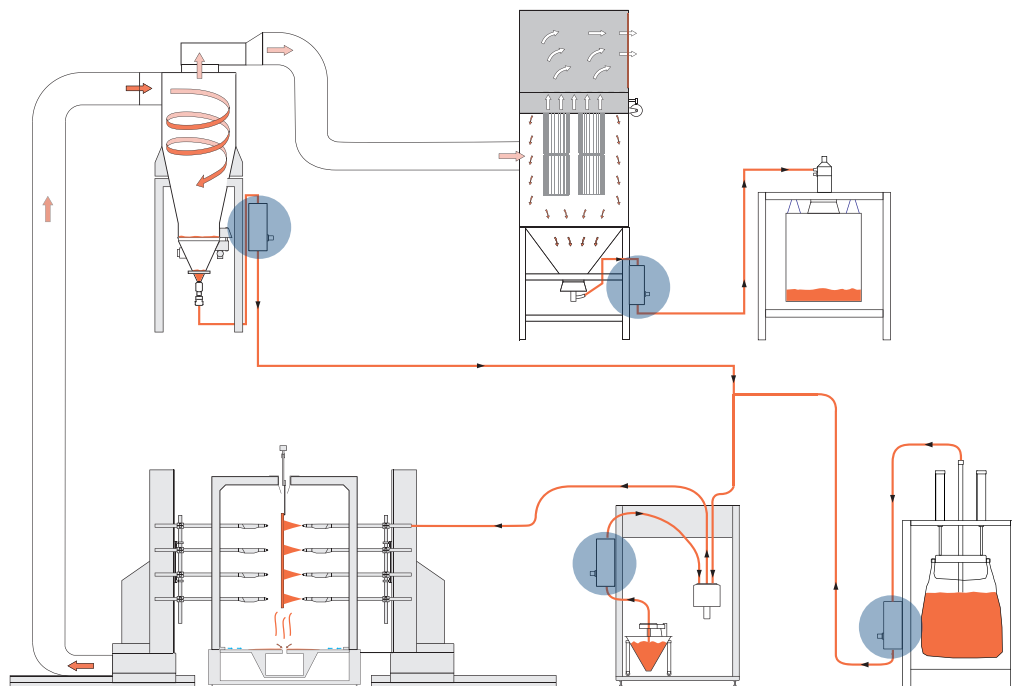
Whether the OptiFeed 4.0 is used for fresh feed or recovery powder, the powder will be gently transferred to the powder hopper.

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).

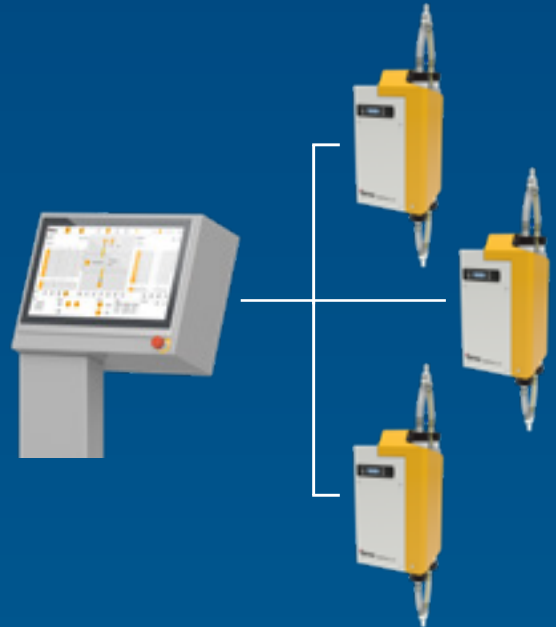
Control

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.

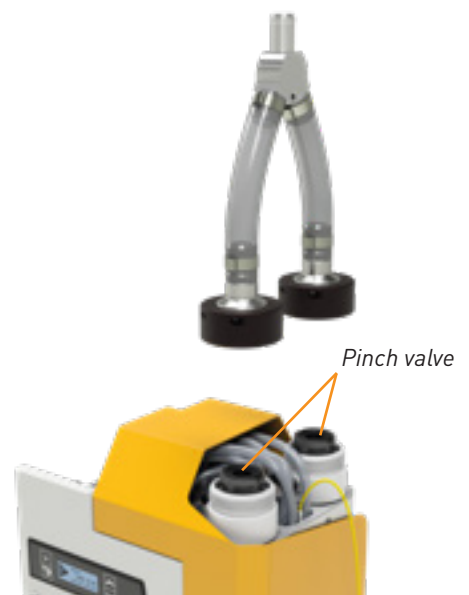
Maintenance system with integrated sensors for reliable performance

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



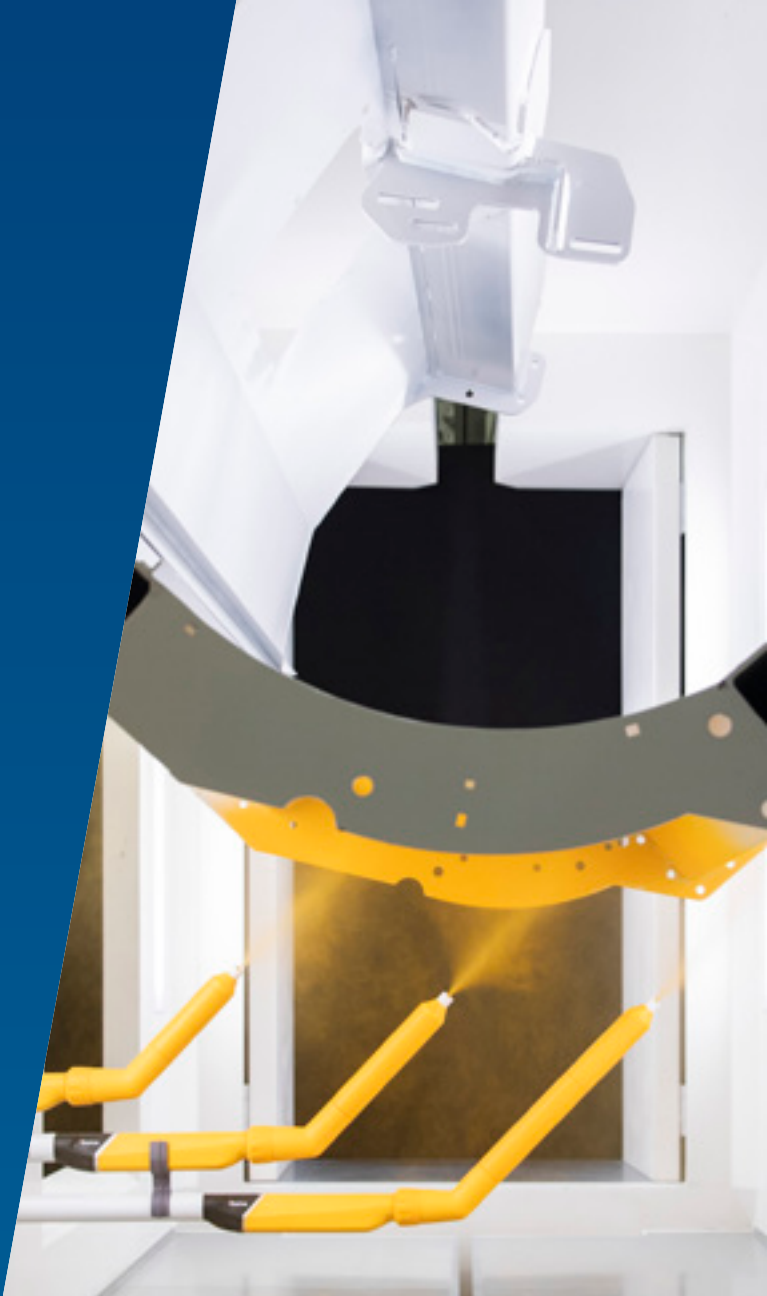
	OptiFeed 4.0 Type PP07 / 24 V	OptiFeed 4.0 (Stand-alone version) Type PP07-S / 100 – 230 V
Powder output Hose length up to 8 m Hose length 8 – 16 m Hose length 16 – 25 m	6 kg/min 4.5 kg/min 4 kg/min	6 kg/min 4.5 kg/min 4 kg/min
Usable powders	Organic Inorganic (Enamel)	Organic Inorganic (Enamel)
Pneumatic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

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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