

# Continuous Conveying and Dosing PFL Powderflex



- Combined system for conveying and dosing powders
- Ideal for toxic and explosive powders
- Continuous feeding of process equipment (reactors, dryers, jet mills etc.)
- Precision dosing in the gram range
- Allows mixing of several components
- Adjustable transfer capacity
- Perfect for pilot plants
- Streamlines processes
- Oxygen exclusion
- Compact and mobile version available
- Easy to clean - CIP



Contamination Free

High Containment

Explosion Proof

High Accuracy

Operator Safety

Easy to Clean

# Continuous Conveying and Dosing PFL Powderflex



The patented PFL Powderflex system provides continuous and precise dosing of small to medium quantities of powder, whether the requirement is for controlled charging of powders into continuous production processes or for predetermined precision dosing.

The technology was initially developed for the plasma and spray coating industries but is now used for a multitude of applications. PFL extracts powder from any container and conveys it over large distances. Its simple design ensures minimal maintenance thus facilitating rapid product changes. Powder characteristics are not modified during the transfer. PFL is to powder what a peristaltic pump is to liquids.

The system comprises two small, calibrated chambers, each equipped with a flat filter in the upper part. A practically continuous powder flow or precise volumetric dosing is generated through a unique valve system. The combined effect of vacuum and pressure

alternately fills and empties the chambers at a high frequency. The transfer rate is easily adjusted by adapting the volume of the chamber or by changing the frequency.

## Design

- AISI type 316L stainless steel, electro-polished
- Other materials available (HC22, plastics, etc.)
- Various hose selection according to application requirements

## Features

- Constant feeding of process equipment (including reactors, dryers, centrifuges, etc.)
- Precise conveying and dosing (1-2%)
- Enhanced precision with weighing device
- Automatic adjustment of transfer capacity
- Extracts powders from multiple containers (big bags, silos, drums, etc.)
- Conveys over long distances > 50 m

- Operates 24/7
- Permits online mixing of several components
- Cost-effective multiple dosing stations
- Operates under inert gas and charges inerted equipment
- Handles explosive powders
- cGMP & ATEX compliant design

## Options

- Adjustable chamber volumes
- CIP
- Mobile version
- Containment level
- Weighing system

## Technical Data

PFL	20	50	75	100	200
Total volume (cm <sup>3</sup> )	20	50	75	100	200
Total weight (kg)	30	30	30	30	30
Conveying capacity (l/h)	50	130	190	250	500

