

Filtration Group application example – Factory Equipment

Solids extraction in the Food Industry



Factory Equipment

Initial situation

The Zeppelin Reimelt GmbH produced fully automatic filter systems for continuous filtration of conveying air from vessels and silos. In this process a **reliable retention of dust and other powdery products** from the conveying air or from other process gases is required. Such pneumatic conveying processes are used in **almost every technical industry**. That is why a compact design of the filter unit and a constant differential pressure are necessary not only in the **food- and pharma industry**. As they get in contact with food- or pharmaceutical products, the **filters have to face highest requirements**.



Challenge

The dust loaded air enters the filter from the bottom side. The volume flow is guided from the outside to the inside through the filter elements. The dust remains on the outside of the filter element and creates a dust cake. Due to the pneumatic pressure or an additional ventilator, the cleaned air is blown back into the production hall or via pipes to the outside of the building. The separated product is back flushed by pressure air and can fall back into the process or can be reused if desired.

Technical Data:

Volume flow: 100 – 3500 m³/h
Filtration rate: 0,5 – 10 µm
Operating temperature:
20-30°C
Explosive dusts



Solution statement

- The filter elements are equipped with conductive Filter medias Ti 07 or Ti 08
- All components are **FDA and EU 10/2011 approved**
- The innovative, special developed element connection is easy to mount and provides **significantly reduced efforts during maintenance** to the operator
- For the Zeppelin Reimelt GmbH there is the further advantage, that now they only have one connection for filter elements and filter sleeves
- The **conical shape** of the elements allows a compact design of the filter housing, optimizes the filter performance and enables a more efficient cleaning process

Customer value

- Special, **customer protected connection system**
- Easy mounting and thereby **reduced installation costs**
- **Reduced maintenance costs** increased element lifetime
- **FDA and EU 10/2011 approval** for all parts
- Usable for **explosive dusts**

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WE CREATE SOLUTIONS



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