

INFASTAUB



Industrial De-dusting

***Breathe The Difference: Pure Air***

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# The Company

Industrial de-dusting is of special significance in times of elevated environmental burdens, climate change, increased energy consumption and conservation of non-renewable resources.

People within industry take on this challenge and invest continuously in modern technologies for efficient dust removal. Infastaub is one of the leading manufacturers in this field.

Infastaub is a major global supplier of de-dusting solutions for industry. Since 1967 we have been providing complete and tailor-made solutions for our clients: from project planning to construction and manufacturing to installation and spare parts supply. Utilising the long-term experience of our engineers, designers and manufacturing specialists we launch new and innovative products and continuously develop our proven filter range.



Infastaub is recognised for its reliability, quality and service. We are a respected and reliable partner for many renowned plant manufacturers and global production companies. You can be sure that we not only provide outstanding technical solutions but also offer the best performance.

As a competent supplier of filtering installations, Infastaub has a long-term, extensive know-how and effective quality assurance systems. Our certification according to DIN EN ISO 9001:2008 guarantees the proper implementation as well as the review of all working processes and compliance with important policies such as environmental protection, occupational safety and material utilisation. The satisfaction of our customers is our ultimate ambition.






Due to their long-term experience, our employees both in the field and office are the most competent in this entire branch of industry. We would be pleased to advise you individually for solutions to your de-dusting problems on site.








# The Performance Profile

Many manufacturing methods involve the formation of excessive amounts of dust, which cannot be prevented easily. At the same time, many regulations and guidelines dictate limits on dust emissions. For this reason, actions must be taken to minimize dust exposure for people and the environment. Also a process-oriented dust separation system allows the recovery of materials.

## Infastaub offers you:

-  Innovative filter systems for a variety of requirement profiles
-  Analysis, conception and manufacturing from one supplier
-  A high level of operational reliability with a minimum of maintenance
-  Single solutions for small companies up to complete systems for large-scale industrial plants
-  State-of-the-art filter systems (i. e. design for ATEX zones, filter media with low pressure loss, pneumatic and electrical components with highest efficiency)

## Your benefits:

-  Maximum protection for people and the environment due to reduced dust exposure
-  Securing a smooth production process
-  Better product purity and a higher level of quality due to less dust. Higher productivity thanks to product recovery
-  Compliance with legal standards
-  Reduction of operating costs by optimal sizing of filters and ancillary units (compressed air consumption, fan power, etc.)



# The Business Fields

## NON-METALLIC PROCESSING

The amount of dust arising in this industry is significant. Consequently, specific process orientated de-dusting systems are very important. Dust emissions can be reduced by more than 99 % with filter systems provided by Infastaub.



## CEMENT, LIME, GYPSUM

It's a long way from the stone quarry to the cement mixer. Thereby, a significant amount of dust is produced from the different work processes. This must be reduced and removed by modern filters. Dust removal solutions by Infastaub reduce dust emissions at numerous stages of the production process.

## ENERGY

Flue gas contributes to air pollution and can locally constitute health risks. Therefore, particle separation is an essential part of energy production. For example, this includes the collection of fly ash in fuel-fired power plants as well as the de-dusting during delivery, storage and metering of additives for flue gas cleaning.



## FOODSTUFFS, DRINKS AND TOBACCO

Exhaust air must be filtered wherever grain, flour, sugar, salt, spices, milk powder and other bulk materials are produced, generated by processes or stored in silos. First priority has the dust removal for product recovery and cleaning of products. Filter systems of Infastaub can be equipped to such an extent that the surface and the filter media comply with the high standard of the food industry.

## PLASTICS

Filter systems are indispensable for the manufacturing and processing of plastics. Dust emissions - resulting from mechanical or pneumatic transport processes, dosage, mixing, weighing and filling – are nowadays de-dusted with decentralised filters that are adapted individually on the process. Because of high demands concerning reliability of the filter systems, well-known companies of this branch focus on filter systems by Infastaub.





## STEEL, IRON, NONFERROUS METALS

Dust generating processes in metals handling are diverse. Wherever metals are cast, milled, ground, polished or brushed emissions occur in the form of dusts, fumes, soot, vapours and gases. It is necessary to take precautions with suitable de-dusting systems in these cases.



## RECYCLING, WASTE DISPOSAL

Many industrial waste disposal systems produce dust and release it to the environment: by shredders, mills, waste bunkers or by cutting, mixing, sorting, transporting, filling, etc. The special challenge is the undefined diversity and composition of disposed products and dusts. Without a well-engineered dedusting plant this would lead to pollution, contamination and health risk.

## GLASS, CERAMIC INDUSTRY

Primarily, dust emissions occur during batch production, preparation for the melting process and during glass processing. Therefore glassworks are subject to an environmentally friendly manufacturing process and the compliance to legal emission standards. Glass-specific dust emissions can be removed from the exhaust gas using fabric filters.



## PAINTS, LACQUERS, SURFACES

The demands on processes and products rise in all industrial and consumer goods sectors. A better surface finish or coating is often a component of these demands. Paints, lacquers and other coating materials consist mainly of a mixture of various finest powders which produce dust during production. Infastaub offers suitable de-dusting solutions for all production steps.

## CHEMICALS, PHARMACEUTICALS

Process technologies in these branches are often very complex due to the production technologies and handling of numerous additives. The likewise high demands on de-dusting solutions concerning safety and reliability require fundamental know-how as well as experience in planning and manufacturing appropriate filter systems.



# The Product Range

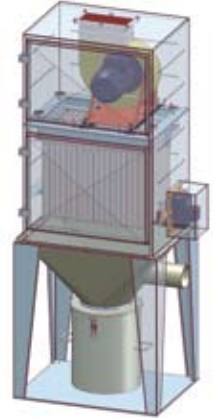
## Mechanically Cleaned Filters

### Pocket Filters

#### INFA-MAT, AM

The mechanically cleaned pocket filter INFA-MAT is a semi-automatic shaker filter. The compact design is suited for installation next to machines and workplaces. Furthermore, this filter is used for dedusting of air displaced from silos during pneumatic filling by silo trucks, if compressed air is not available for filter cleaning.

- ❑ Filter unit with motorized cleaning device, with expandable modules
- ❑ Also available in stainless steel or for hot gases up to 130 °C
- ❑ No compressed air supply required
- ❑ Replacement of filter pockets without tools



#### INFA-BOY, IFB

The INFA-BOY dust collector is a mechanically cleaned small filter unit with integrated fan for aspiration of dust-laden air from machines and workplaces. In principle, the INFA-BOY can be used for work processes with an intermittent operating mode.

- ❑ Closed compact design with integrated fan, silencer and dust collection drawer
- ❑ No compressed air supply required
- ❑ Replacement of filter pockets without tools



## Pneumatically Cleaned Filters

### Pocket Filters

#### INFA-JET, AJN

The INFA-JET pocket filter system is designed for continuous de-dusting of machines and workplaces as well as for central aspiration. The deposit of dust or powdery products can be carried out from both exhaust air and also process gases. Depending on the application, a variety of designs and variants of the INFA-JET pocket filter system is available. The INFA-JET also dedusts processes or products for which cartridge filters or other pleated filter elements aren't capable.

- ❑ Basic unit consisting of closed filter head, filter pockets and pneumatic cleaning unit, with expandable modules
- ❑ Universally applicable pocket filter system, also available in pressure resistant or pressure-shock resistant design, available in stainless steel or for hot gases up to 240 °C



# Cartridge Filters + Bag Filters

## INFA-JETRON silo filter, AJB

The INFA-JETRON is a fully automatic silo filter for de-dusting exhaust air from silos or containers filled by pneumatic conveying processes. The filter is suitable for all dry and free-flowing bulk materials.

- Silo-top filter with pneumatic cleaning unit, filter housing made of stainless steel and hinged weather protection hood
- Replacement of filter media without tools
- Also pressure-shock resistant design available



## INFA-JETRON silo filter, AJP

The INFA-JETRON AJP is a fully automatic vent filter for de-dusting exhaust air from silos or containers. The filter is suitable for all dry and free-flowing bulk materials. It can be used for all applications where a product/dust/air mixture continuously arises over a long period of time.

- Vent filter with pneumatic cleaning unit, filter housing made of mild steel and removable top cover, with expandable modules
- Replacement of filter media without tools
- Also available in stainless steel or for hot gases up to 130 °C



## INFA-JETRON dust collector, AJP

The AJP cartridge filter is a dust collector for continuous de-dusting of machines and work-places. It is designed for dry and easily free-flowing dusts.

- Basic module as dust collector with hopper, dust collection bin and pneumatic cleaning unit, with expandable modules
- Replacement of filter media in normal working height to the raw gas side



## INFA-VACUTRON, VAC

The INFA-VACUTRON is a suction conveying unit for feeding receiver tanks with powder mixtures and granulates.

- Basic unit consisting of closed filter head with filter elements and pneumatic cleaning unit, filter housing, skirt support, storage hopper and discharge damper
- Filter housing and all components in contact with the product/dust are made of stainless steel
- Housing strength up to +/- 0.5 bar g for suction-pneumatic operation



### INFA-VARIO-JET, AJV

The INFA-VARIO-JET filter series in round housing design is designed for de-dusting pneumatic conveying processes of bulk materials. However, this filter series can generally be used for all applications, where a product/dust/air mixture continuously arises over a long period of time. This includes de-dusting of mechanical transport and manufacturing processes. As a standard, all components in contact with the product are made of stainless steel.

- Basic module consisting of closed filter head, filter elements and pneumatic cleaning unit, with expandable modules
- Housing strength up to +/- 0.5 bar g for pressure- or suction-pneumatic operation
- Also available in pressure-shock resistant design or for hot gases up to 130 °C



### INFA-MINI-JET, AJM

The INFA-MINI-JET is a versatile round filter series, which can be individually designed to provide customer-specific variants. The fully automated filter guarantees not only the separation of dust and bulk materials from exhaust air, but also from process gases due to its optional design for hot gas, pressure resistance or gas-tightness.

- Basic unit consisting of closed filter head, filter elements and pneumatic cleaning unit, with expandable modules
- Also available in stainless steel, pressure-shock resistant up to 10 bar g or for hot gases up to 240 °C



### INFA-INLINE filter, INF

The INFA-INLINE filter is a non-cleanable safety filter to protect compressors and processing machines in the event of a breakdown of primary filters. Once the maximum allowable filter pressure drop is reached the filter cartridges have to be replaced.

- Closed filter housing with supporting feet, inspection door in the raw gas area as well as slewing mechanism for top cover on the clean gas side
- Housing strength up to +4.0 bar g for pressure or vacuum operation
- Also available in stainless steel, pressure-shock resistant up to 10 bar g or for hot gases up to 160 °C





# Pleated Element Filters

## INFA-LAMELLEN-JET, AJL / AJLS

The INFA-LAMELLEN-JET series combines a maximum filter area with a minimum required space and as a dust collector it is suitable for dry separation of all free-flowing dusts and bulk materials. Due to additional modules the INFA-LAMELLEN-JET filters can be customised and adapted to air flow rates from 2,000 m³/h to 40,000 m³/h.

- Closed basic unit consisting of raw gas chamber with dust collection hopper and support structure, clean gas chamber with filter elements and pneumatic cleaning unit, with expandable modules
- Also available in stainless steel or pressure-shock resistant
- Also available as specially designed model AJLS with second filter stage, safe change system for change of dust collection bin and filter elements or with wetting system „First Rinse“



# Cassette Filters + Cartridge Filters

## INFA-MICRON cassette filter, MKR

## INFA-MICRON cartridge filter, MPR

The INFA-MICRON filters are a complete series for filtration of dusts and airborne particles that are respirable, hazardous to health or toxic. This includes the INFA-MICRON cassette filter (MKR) as well as the INFA-MICRON cartridge filter (MPR) by which residual dust contents below 0.001 mg/m³ are achieved by using HEPA filter media. This feature makes the MICRON-series ideally suitable for the chemical and pharmaceutical industry. Thanks to the modularly design, both INFA-MICRON types are available with one or two filter stages as cleanable dust collectors or as non-cleanable safety filters. Also available is a model for mobile use at different dust sources or in laboratories.

A special feature is the optional „Safe-Change“ system helping maintenance personnel to carry out dust bag disposal and exchange of filter media preventing contamination which means without getting in contact with the dust. This is an essential element of an effective containment concept.

- Cleanable cassette or cartridge filter system, with expandable modules with one or two filter stages, with various accessories, for example closed dust collection system via screw conveyor or pneumatic transport system for dust disposal
- Closed filter housing with hopper and dust collection bins, filter cassettes / cartridges and clean gas chamber with pneumatic cleaning unit for the first filter stage
- Electronic control unit with PLC for filter cleaning controlled by time sequence or differential pressure incl. valve control, monitoring of individual operating conditions and indication via clear text display
- Also available in stainless steel, gas-tight or pressure-shock resistant design (no pressure relief necessary)



# Loading Systems

## INFA-POWTRON, BKF

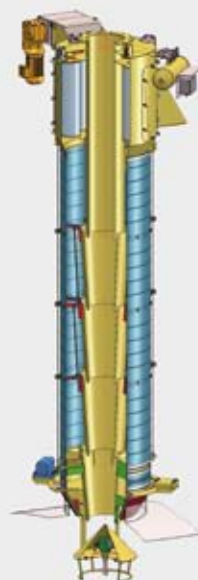
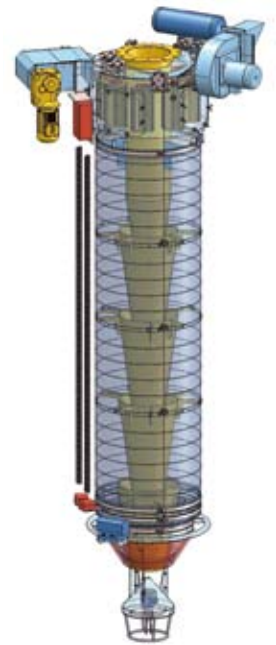
The INFA-POWTRON is a loading system for dust-free loading of free-flowing, powdery or granular bulk materials.

Through the inner loading bellow or an inner cup system, the bulk material is filled into the transport vehicle. The displaced air from the vehicle is sucked upwards by a fan through the annular gap between the inner loading bellow and the outer bellow. The exhaust air is cleaned in the loading head by integrated filter cartridges.

The lowering of the loading bellow stops when bottom cone touches the filling dome of the transport vehicle. If the vehicle lowers during the filling process, the bottom cone will follow automatically.

When the vehicle's filling level reaches the level indicator at the lower end of the BKF bottom cone, the indicator will send a signal to the control panel to stop the loading.

- ❑ Loading capacity up to 300 tons/hour
- ❑ Expandable modular system for flexible adaptation to specific applications (e.g. variable loading heights), accessories
- ❑ Loading head with cable winch, exhaust fan and concentrically arranged filter cartridges incl. pneumatic cleaning unit
- ❑ Electrical cable winch with slack rope switch in dual-rope design
- ❑ Product flow through inner loading bellow or wear-resistant cup-systems; dust-laden air flow along outer loading bellow
- ❑ Bottom cone with outer rubber coating, closing cone and fork type level indicator
- ❑ Also available in stainless steel or for hot gases up to 120 °C
- ❑ Electronic control system incl. signal exchange with customer provided shut-off valves or conveying equipment







# Infastaub is there where you need us






We are globally established and our associated companies are present in 19 countries. This way we can advise our clients face to face and accompany them - from initial project planning to commissioning of our systems.



Infastaub offers **de-dusting solutions** for many industrial sectors and a variety of applications:

-  Volume flows from 20 m<sup>3</sup>/h to approx. 20,000 m<sup>3</sup>/h handled by standardised filter series
-  Volume flows > 20,000 m<sup>3</sup>/h available on demand
-  For all production steps from de-dusting machines and workplaces to central aspiration
-  From filter systems in serial production to tailor-made individual solutions (for example filter according to GMP, optional pre-coating or additive supply)

The **product range** covers:

-  Mechanically cleaned filters
-  Pneumatically cleaned filters
-  Special filters
-  Loading systems
-  Technical assistance, field service, spare parts and maintenance service





**INFSTAUB** 

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