



Dear reader,

limit values for dust loading at workplaces continue to decrease. In Germany last April the general dust limit for respirable fraction (ASGW) decreased from 3.0 mg/m³ to 1.25 mg/m³. Affected by this modification are workplaces where dusts of low solubility respectively insolubility occur, e. g. mineral dusts, aluminium, aluminium oxide, graphite, coal and plastic dusts. A transitional period for implementation of the new regulation is granted until December 31st, 2018 – all workplaces and equipment must be technically adapted to the new limit value within this period.

As manufacturer of de-dusting filters with great sense of responsibility we support all concerned industries with a wide spectrum of high-performance filter units that are especially developed for these demands. Our products contribute to dust reduction and protect your employees. A view at our projects shows how we fulfil the requirements of our customers and their de-dusting tasks always with utmost care. At this point we thank our numerous customers in Germany and abroad for their great trust and loyalty to Infastaub. I look forward to the continuing cooperation with you and further exciting projects.

Yours

Berthold Geppert



Infastaub filter units for gummi bears



Every child knows gummi bears. Until the iconic nibbling for young and old ends up in the bag, the fruit gums have passed several production steps. The core part of production is the so-called mogul machine at which end the gummi bears fall on the conveyor belt.

First of all a jelly mixture is filled into a plaster mould which has been powdered with starch before. Afterwards the gummi bears have to solidify completely. The starch

trays are turned afterwards and their content falls onto a vibrating sieve. The gummi bears are collected and the starch powder falls through the sieve. Still sticking starch powder is removed from the gummi bears by brushing-off and blowing. For de-dusting of this powdering station and the starch powder dryer the leading producer of fruit gums uses Europe-wide pressure shock resistant pocket filters of Infastaub.

Because of the long lasting cooperation and the positive experiences with the installed filter units, a cartridge filter type Infa-VarioJet was installed in one plant at a packaging machine. The filter unit with 15m² filter surface area sucks sugar particles that partly stick to the gummi bears from the powdering station. Therefore the sealing of the bags with gummi bears can be done free of dust. The filter housing is made of stainless steel because of contact with food.

Infastaub hands over the won soccer table

Visiting Infastaub at the POW-TECH 2014 was worth it for Stefan Rebstock. Lady luck was at his side when drawing the soccer table. „A great surprise for my colleagues and me. It's not every day that you win a soccer table that now stands at our premises", says the winner from Ladenburg. Jens Kampmeyer, Head of Sales, and his colleague Johannes Jäger handed over the soccer table to the winner shortly after the trade fair.

There is a new chance to win a soccer table at the Achema in June this year. We invite you to match at our booth B49 in hall 6.0. The soccer table will be drawn the last day of the fair.



Pocket filter ensures a residual dust content of 1 mg/m³

At the company MINERALplus from Gladbeck mineral waste like ashes and reaction products from flue gas cleaning are processed to building materials. The recycled materials come back to the economic cycle and are used for road construction, cavity filling, underground or landfill construction. By using these materials large quantities of natural building materials like cement, lime or gypsum can be saved. Significant costs can be reduced. In short: recycling of mineral materials proves to be economic and ecological. But dusts that are partially toxic or breathing is hazardous to health, result from processing and handling the recycling materials.

In order to protect health of employees, the company decided to award the order for a central filter unit of type InfaJet AJN to In-

fastaub. The pocket filter reduces the clean gas dust content below 1 mg/m³. A further order of a 2-stage filter was also awarded to InfaStaub. The pocket filter is downstream the new pocket filter and additionally gathers the exhaust air of 12 InfaStaub silo filters that have already been installed. A maximum volume flow of 48,000 m³/h was considered when designed. The first filter stage has filter media of filter class F7, HEPA filter cassettes of class H13 are designated for the second filter stage.



De-dusting of a silo filling under outstanding circumstances

In Bahrain dominate desert conditions, temperatures far more than 40 °C are usual in the summer months. In addition exist strains of salty air and high humidity, which averages at 75 %. Machines and plants must be customized to these conditions, for example with a

high quality and durable paint coating. A sun screen is also necessary depending on the location.

Two InfaStaub filter units have been arranged for these special circumstances. De-dusting of the ship unloading and pneumatic silo

filling at the harbour terminal of Manama, Bahrain, is carried out with two pocket filters type InfaJet AJN. The filter surface area of altogether 240 m² allows a flow capacity of 18,000 m³/h at a dust load of 5-20 g/m³.



What is actually doing ...?

Bernhard Voß Sales office area North



A client gave Bernhard Voß the clue about the job vacancy in the sales force of Infastaub. The job was tailored directly to him. Since he joined the company five years have been passed. From his home based office in Lübeck the 46 year old industrial engineer is in charge of his clients in the sales area North, an area that extends from Flensburg to Paderborn.

Tell us something about your typical workday.

I have no daily job routine with my tasks. This is for example due to a missing nine-to-five-job. Some

days I only work in my homeoffice and make telephone calls, answer E-Mails, calculate new offers, take care of the process layout of projects. On other days I start very early to my clients. This might be because of important invitations to tender we attend, or our clients need to discuss about projects, acquisition of potential customers or taking the site measurements for a new filter unit. The tasks in the field are very versatile so that I'm away on business one-third of my time.

What is your daily challenge?

Field staffs are "lone warriors". They have to structure the daily work themselves. This means a great degree of freedom what I appreciate. But with Infastaub I have found an employer who provides filter units for very different industries. This ranges from small silo filters for pneumatic conveying to filters for suspended matters which

are used in the pharmaceutical industry. My first experiences in de-dusting originate from a filter manufacturer in Lübeck who provided filters for black zones. After 15 years I changed to a filter manufacturer who specialized on filter units for clean areas, means pharma filters. Now with Infastaub I can contribute my experiences from both ranges.

You travel a lot. Do you still have time for hobbies?

There is not a lot of time with three adolescent boys. Whenever possible, I support the youth of my rowing club and try myself to keep in shape with sailing, rowing and cycling.

Jürgen Tautz project engineer



Jürgen Tautz is a new hire at Infastaub but very experienced in his profession. Already for 33 years the 57 year-old process engineer works in the field of de-dusting. In October 2014 he accepted the offer of Infastaub and engages since then especially in further development of filter units for the pharmaceutical industry.

What can we associate with your tasks?

I support the sales department with accompanying planning discussions, acceptance of tenders to commissioning of filter units. I am

more or less the technical tie between our sales men and our customers. In addition I take care of improving existing filter units and developing new filters – everything of course with keeping proved components.

Can you already whistle-blow something about product improvements?

At this point of time I can not reveal a lot. But just so much that we develop a new cassette filter for applications in the pharmaceutical industry. Significant feature of the new development is a lower construction height than the now used pharma filter Infa-Micron MKR has. Production plants of the pharmaceutical industry usually don't have enough height. We take these circumstances into account. Another new feature is the advantageous handling of the filter. The filters are much more attractive for

operators, especially because of an easier handling in case of maintenance.

What do you like most about your tasks?

De-dusting must adapt to the specific characteristics of the production processes so that manufacturing and processing is carried out in needed quality and without interruptions. Sometimes the filtration processes do not work anymore because of incomprehensible reasons. It borders on investigative work to find out the causes. For example a filter of a client clogged because an employee sprayed extensively penetrating oil in the surrounding of the filter. It found its way into the filter then, too. Sometimes it is necessary to reconstruct meticulously which changes in production process have been made. We look then for the well-known needle in a haystack.

Infa-Inside

New plant II



InfaStaubs former plant II has moved from Bad Homburg to its new site – just a few kilometres away from the main production facility. The removal was necessary because of the terminated leasing contract. InfaStaub found a new place in Oberursel and purchased the 2,300 m² sized property including production hall. „We are happy that we found a long-term prospect for our company with this production site“, says General Manager Berthold Geppert. The area „An den 3 Hasen“ gives enough space for growth.

A total of 1,200 pieces and six wel-

ding places had to be moved. Prior to the move the entire plant was converted. Beside groundwork, a new electrical power supply, crane systems and column-mounted slewing cranes, the welding fume exhaust system was renewed. The filter unit is now controllable directly from each working place. In addition InfaStaub paved the way for a white production and an inspection hall. Now the storage facility and production site are tailor-made for the needs and processes of InfaStaub.

„The new production site in Oberursel gives us the chance to expand our growth opportunities consistently and continuously. With our established staff and a considerably bigger premises, we can realize the expansion of our filter series“, says Joachim Lamberti, Production Manager at InfaStaub. The removal to the new plant took place in the second half of December 2014 without disturbance of production.

ACHEMA 2015

Every three years Frankfurt is the epicentre of process technology. From June 15th to June 19th, 2015 the industry meets in the fair halls of the Achema. Almost 4,000 exhibitors are expected. InfaStaub is present in hall 6.0 at booth B49 and shows its broad range of proven solutions for de-dusting in the chemical, food and pharmaceutical industry..



Dedusting knowledge Parameter with influence on the air-to-cloth ratio

The air-to-cloth ratio should be generally between 0.5 m³/(m² min) and 2.5 m³/(m² min). Common pressure drops of the filter media are between 400 Pa and 1,500 Pa. These ranges are determined, among others, by the following aspects:

- dust characteristics
- air-to-cloth ratio
- type of the filter media
- clean-gas dust content
- lifetime

Among others, the following aspects need to be considered to determine the air-to-cloth ratio:

- the raw-gas dust content
- the target clean-gas dust content
- the target system pressure drop
- the target service life of filter medium
- the gas composition (specifically the moisture content)
- the design of the separator / space requirements
- the cleaning type of the filter medium

particle characteristics	effects on filtration performance
sticky-humid	good particle separation, bad dropping of filter cake
good agglomerating (large pouring angle), dry	good particle separation, good dropping of filter cake
free-flowing (small pouring angle), dry	bad particle separation, good dropping of filter cake