



Dear Reader,

2017 was an exciting year. Obviously the euro zone is recovering from the deep economic and finance crisis. However, among the risks of this year are the protectively minded course of the US government, the effects of the Brexit or the stability of the euro zone. Despite some uncertainties the German Chamber of Industry and Commerce (DIHK) increased its growth forecast for 2017 to now 1.6 percent based on a current economic survey. 1.2 percent were predicted in last autumn. The incoming orders of the last quarter 2016 indicate an increase of productivity growth.

InfaStaub also has well filled order books. Continuous innovations and improvements of our filter systems, a greater presence on the market and the competence to realise specific customer wishes and highly sophisticated demands are the engine of this success. That's why we have good reason to look with confidence into the future.

I am happy to continue the InfaStaub success-story with you and wish you a lot of fun with the new issue of our InfaStaub newsletter.

Cordially

Berthold Geppert



## Dustfree silo filling

Imagine, cement, sand and gravel would separately be transported to a construction site and mixed laboriously there by hand. A constant mortar quality could not be reached with this „mixture by chance“. It was like that 100 years ago. 1936 the American civil engineer Arthur C. Avril revolutionised the building industry. He sold for the first time premixed and packaged dry mortar under the product name Sakrete. A constant mortar quality could now be guaranteed.

Producer of mortar on the European market is the Sakret group. In the north German production site Hensted cement silos were retrofitted with eight silo vent filters of InfaStaub. The cartridge filters type Infa-Jetron AJB ensure a dustfree pneumatic filling of the silos by silo vehicles.

Inside the silo a dust cloud occurs during filling. It is displaced off the silo by the conveying pressure. From here on the silo vent filter fulfils two functions. The displaced air leaves the silo via the filter unit and a pressure compensation takes place. Most important function however is the separation of dust and gas at the filter element. Then cleaned air can exhaust and the maximum permitted residual dust content is kept.

The air volume to be cleaned of each silo filter is 900 m<sup>3</sup>/h during conveying and 2.700 m<sup>3</sup>/h during final surge.

Marcus Neumann, deputy operations manager, is very satisfied



with the new filter units. Now, the silos can be filled faster and the environment remains dust-free. The pressure switches integrated in the filter unit help in achieving this. The first pressure switch activates the filter cleaning in case of overpressure inside the silo, which occurs during filling. The second pressure switch helps in case of a too fast filling of the silos. Then the final surge is reduced to an acceptable level so that the pressure flaps don't open. The environment remains dustfree then. The final surge limitation is executed by on-site pinch valves within the filling pipe, which is activated by the second pressure switch.

# Infa-Inside

## Severstal invests in dust reduction

The privatised steel producer Severstal is the Russian industry leader. The steel works and the associated city Tscherepowez were built out of a hat by Stalin in the early 1950s. A good 60 years later, the steel maker is privatised and produced almost 12 mio. t crude steel in 2015.

Severstal produces predominantly rolled steel in its modernised

plants and is leading in producing band steel, cold-rolled sheets and strips and galvanised steel. Also coal minings, ore refinement works as well as the automotive manufacturer UAZ, who is specialised in robust off-road cars, belong to Severstal. About half of the steel production is exported, mostly to Asia and Europe.

The steel manufacturer has the re-

putation to be one of the best managed corporation in the country. This also relates to environmental protection. Since 2012, 6.6 billion Rubel have been invested in measurements for emission reduction.

New refurbishment project is the replacement of the coke-oven battery No. 4. Part of the refurbishment is dedusting of different conveying transfer points and the loading of coke dust from a bunker into silo vehicles.

Infastaub delivered therefore eight pocket filters type Infa-Jet AJN. The occurring dust of the transfer points is separated by the filter units and returned to the transport process. The vent filters are designed for air volumes of 24,000 m<sup>3</sup>/h respectively 5,000 and 10,000 m<sup>3</sup>/h.

Two Infa-Powtron BKF loading systems were ordered for the dust-free loading of coke dust from a filter bunker into silo vehicles.



## International conference „dust gas cleaning“ in Moscow

Once a year the conference on „dust gas cleaning“ takes place in Moscow. A still relevant issue in Russia, because emission value limits of industrial plants are still often exceeded. A result of forced industrialisation at times of communism. The inherited burdens can still be felt today. In the meantime, the Russian government has recognised environmental damage as a danger and declared the year 2017 as „year of ecology“.

More than 30 speakers and 200 guests discussed during the lec-

tures and at the stands about cleaning of flue gas and process gas.

Alexander Töws, managing director of the 2016 established Infastaub RUS subsidiary, gathered the participants to his presentation „explosion protection in filter units“. This aspect is beside reduction of dust emission values an important criteria when handling dusty products.

For the young company Infastaub RUS, participating was an important step to increase awareness level of the company.



## We are at the „Schüttgut“ in Dortmund: May 10th and 11th, 2017 - hall 4 stand E09

On May 10th and 11th, 2017 it's all about handling of bulk solids. In the centre of the trade fair are the manifold transport and process steps of coarse and fine grained materials - dedusting technology is part of that.

Infastaub is exhibitor at the „Schüttgut“ since the very beginning and exhibits also this year.

We present at the stand among others a transparent filter with visible cleaning device and different filter media. This way, the interior can be excellently viewed during cleaning with pressurized air pulses.

You would like to visit us at the fair? You find us in hall 4, stand 09. Or demand your entry voucher right away. Send us an e-mail or fax or just call us!



## Requirements on filter systems in pharma processes

Regarding processing of active pharmaceutical ingredients to e. g. solid pharmaceutical forms (tablets, coated tablets, capsules etc.), dedusting is an elementary part of the production process. Because dust occurs inevitably when raw

material is led to machines.

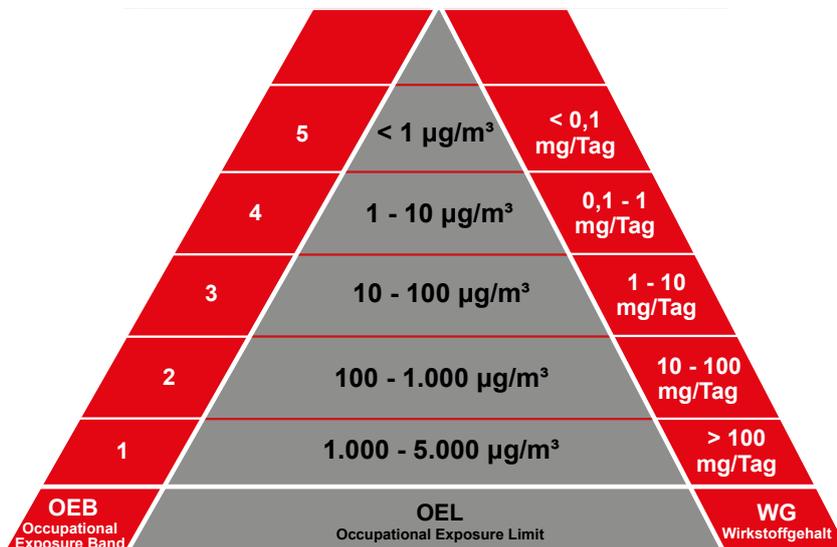
Suitability of a filter system for certain substances is depending on prior determined OEL values („Occupational Exposure Limit“). They quantify the amount of substance

per standard cubic metres of breathing air, a person can be exposed for eight hours without affecting his health.

OEL values are classified in OEB classes (Occupational Exposure Band). A substance with an OEL value of  $3 \mu\text{g}/\text{m}^3$  matches for example OEB 4.

A filter unit must fulfill different requirements according to this class. Open and half-open exhaust systems are appropriate for OEB classes 1 - 2. Systems with primary containment though are required for OEB 3 - 5. Usually a RABS Containment System (Restricted Access Barrier System) is sufficient.

Pharmaceutical production processes with OEB requirements must be equipped with highly efficient safe-change filter systems.



## Bulk material density

The Infastaub lexicon of dedusting already supplies a lot of knowledge about dedusting and filter technology. We now also inform you on our website about many important bulk solids and their bulk weight in  $\text{kg}/\text{dm}^3$ .

The density of bulk solids is an important physical data and of crucial significance for dedusting. Just have a look at our website and get information about your bulk solid density:

[www.infastaub.de/entstaubungswissen/schuettdichten/](http://www.infastaub.de/entstaubungswissen/schuettdichten/)



## What is actually doing ...?

### Petra Buhmann Sales assistance



Since 2010 Petra Buhmann is part of the sales team of Infastaub. However, the 46 year old IT Management Assistant and mother of two children knows the company since her childhood.

#### Why do you know Infastaub for such a long time?

My mother worked for Infastaub when I was still a child. Sometimes I visited her in her office. Later, I had several times a summer job at Infastaub.

#### What is your task at Infastaub?

My main job as sales assistance is supporting our sales department. That are manifold tasks, like e.g. preparing statistics, registrations in supplier portals, updating of our customer data within the CRM, issuing of residual dust guarantees for our customers and much more. I also support our marketing team with planning, organisation and performing of trade fairs.

#### What do you like most about your job?

That are on the one hand Infastaub as employer and on the other hand my tasks as sales assistant. Infastaub has an open and collegial working atmosphere. I appreciate this very much.

Especially the versatility and crea-

tivity of my tasks bring fun into my daily work. The time flexibility because of my part-time job is for family reasons very advantageous.

#### And your life beside your job?

My family is in the frontline. Best relaxation for me is reading and hiking. And when I am not under time pressure, then I like cooking.

#### Three words that describe you:

Organised, cheerful, family-related

#### If you could make a wish:

I would like to live for a half year in Florida, especially during our winter months. The other half year I would like to live on a mountain alp. There I could keep up in particular with my hiking passion.