



## SCHEUCH BAGHOUSE

PIONEERING FILTRATION TECHNOLOGY

# THE CLEAN SOLUTION

## For the ultimate customer advantage

The Scheuch Group, with its offices all over the world and its headquarters in Aurolzmünster, Upper Austria, is an international leader in technologies for air pollution control. The plant manufacturer draws its innovative strength in the field of dedusting and product recovery from the experience it has acquired by installing thousands of filter systems.

A comprehensive product range was developed specifically for the dedusting of large volume flows. The modular layout of these filters enables the system to be precisely adapted to customers' requirements in terms of technical processes and site conditions.

The range of designs includes row and chamber filters arranged in one or two rows, with bag lengths up to 12 metres. In addition to the conventional "online" and "offline" operating modes, there is also the option of using the unique emc technology. This makes it possible to achieve volume flows of over 3,000,000 Am<sup>3</sup>/h for dedusting, product separa-

#### DID YOU KNOW THAT ...

- → the row or chamber filters are equipped with the tried-and-tested Scheuch impuls cleaning system?
- → you can achieve a filter area of up to 40,000 m<sup>2</sup>?
- → the bag length can be up to 12 metres?
- → crude gas dust load can be higher than 1,000 g/m<sup>3</sup>?
- → operating temperatures of up to 280°C are possible?
- → the operating pressure can be as low as -150 mbar?

tion and gas cleaning in a wide range of different industries.

Scheuch's high-performance in-house production process, with a high level of vertical integration and an international network of select partner suppliers are what make its product quality so high.

#### REFERENCE PROJECTS FROM SCHEUCH'S METAL, ENERGY AND INDUSTRIAL MINERALS INDUSTRY DIVISIONS.



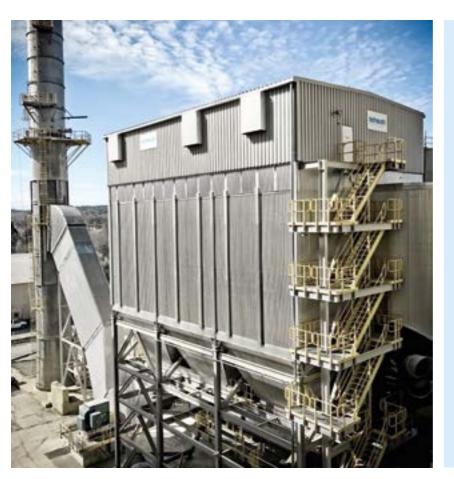


### EMC TECHNOLOGY

### Energy Minimizing Concept: the original solution from Scheuch

NEW DEVELOPMENTS ARE BEING PURSUED EVERY DAY BY SCHEUCH'S VERY OWN TEAM OF TECHNOLOGISTS.

Optimisation of the investment and operating-costs is limited when it comes to conventional filter technologies, in terms of both the technical functionality and the use of filter bag lengths. Thanks to emc technology these aspects can be enhanced and operating-costs significantly reduced. Scheuch is setting new standards in pressure loss, cleaning pressure, bag service life and bag length. The sum of its advantages over other systems, makes emc technology the modern benchmark of technical innovation. But only by applying the patented, mirror-image control of the shut-off devices of individual modules is it possible to combine the well-known advantages of online and offline operation. This ensures a consistently low differential pressure over the entire operating time.



#### Advantages of superior technology:

 Significantly improved bag service life at low filter differential pressures thanks to efficient and gentle cleaning and lower cleaning frequency

nted bu

Patent no. **EP 1404434** 

- → Low compressed air consumption as the filterbag is cleaned at zero-can-velocity
- → Advantages for upstream processes and product quality thanks to the minimisation of fluctuations in filter differential pressure
- → Minimal sound emissions thanks to the low cleaning pressure
- → Maximised system availability due to the clean gas modules that can be shut off individually in the event of bag damages
- → Minimised lifecycle costs due to reduced operating-costs

### ONE SCHEUCH FILTER A THOUSAND POSSIBILITIES

## Custom technologies for any application





### NUMEROUS ADVANTAGES

## Leading with innovation

The coordinated fine-tuning and interaction between individual components of the Scheuch impuls cleaning system provide a high-performance overall unit. This technology – which is subject to continuous development – has a clear advantage over conventional solutions on the market and enables consistent cleaning of each individual filter bag across the entire length of the system. This results in uniform ageing of the filter media with the lowest possible differential pressure. The extremely high percentage of secondary air enables the lowest possible compressed-air consumption and stops the dew point falling below the setpoint value, which would have negative consequences for the system.



THE SCHEUCH IMPULS CLEANING SYSTEM WITH TWIN NOZZLES ENSURES CONSISTENT CLEANING THROUGHOUT THE FILTER BAGS.

#### ADVANTAGES IN BRIEF:

- $\rightarrow$  Low filter differential pressure thanks to efficient separation
- ightarrow Long filter bag service life due to equal distribution of compressed air
- → Process reliability ensured by the latest generation of filter controllers from Scheuch
- → Easy maintenance and repairs

### APPLIED EXPERTISE

## Customer advantages in focus



Decades of experience are put into practice by Scheuch from the planning stage right up to the commissioning of the filter – a level of expertise reflected in countless plant construction projects. Every day, the experts at Scheuch carry out extensive analysis of process data to find the best solution for customer requirements. The result is a low pressure loss, which is made possible by optimising the inflow and outflow of the filter and by using the appropriate filter bags.

### Flow-optimised filter design

With uniform dust and flow distribution and effective pre-separation, all of the filter area is used most efficiently, to keep the filter differential pressure at a minimum and increase the service life of the filter bags to a maximum. In addition, any damage to the bags is effectively prevented because flow bypasses are avoided.

#### BENEFITS AT A GLANCE:

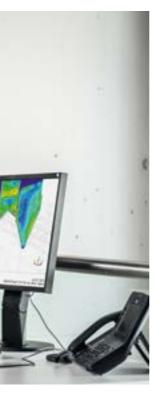
- → A tailored solution enabled by process-oriented designs
- → Low plant differential pressure thanks to optimised dust and gas distribution
- → Timely service delivery with very short cycle times
- → Reliable adherence to guaranteed values
- → Installation and commissioning carried out by highly qualified Scheuch personnel
- → Maximum operational reliability thanks to supervision from Scheuch and a comprehensive after-sales service

### Choosing the right filter media makes the difference

When choosing the right filter media, the focus is on achieving the following attributes:

- → Minimum dust content in clean gas
- → Minimum pressure loss
- → Long service life

The result is a filter medium with ideal filtration characteristics and reliability in accordance with the defined process data. The tailored fit and equipment of the filter bags complete the overall package.



THE EXPERTS AT SCHEUCH RUN STATE-OF-THE-ART CFD SIMULATIONS TO FIND CUSTOMERS THE BEST SOLUTION TO ANY CHALLENGE.

#### AT A GLANCE:

- → Low investment costs thanks to customised configuration
- → Little secondary investment required from the customer due to networkenabled plant designs
- → Low maintenance and repair costs owing to high availability with maximum operational reliability
- → Operating costs kept to a minimum by defining the optimum operating point
- $\rightarrow$  Maximum availability of spare parts

#### Life-cycle-costs

The extent of life-cycle-costs incurred by longlasting capital goods depends largely on the **operating-costs**. Calculated from the product's service life, these costs are normally many times higher than the **investment-costs**. The center target of Scheuch's business philosophy is to offer all customers the most economical and efficient solution, which is adapted to their individual needs. In accordance with this aim, each filter is designed with the ideal operating point in mind. By integrating various sensors, process-specific metrics such as temperature, gas volume flow and pressure are recorded on an ongoing basis – a form of digital connectivity allowing the system to adapt continuously to the operating conditions at hand. This high level of responsiveness has a huge impact on a filtration plant's operational reliability, and is therefore one of the most important factors in ensuring plant availability is over 99%.

WITH THE EXPERTISE IT HAS BUILT UP OVER MANY YEARS, SCHEUCH CAN FIND THE RIGHT DESIGN AND THE OPTIMUM OPERATING POINT FOR EVERY FILTRATION PLANT, TAKING INTO ACCOUNT LIFE-CYCLE-COSTS.





Scheuch GmbH Weierfing 68 4971 Aurolzmünster Austria

 Phone
 +43 / 7752 / 905 - 0

 Fax
 +43 / 7752 / 905 - 65000

 E-mail
 office@scheuch.com

 Web
 www.scheuch.com