THE JET IMPULS FILTER

A SCHEUCH CLASSIC

The filter bags are cleaned using compressed air pulses. The dust-laden crude gas enters the filter casing and is diverted upwards by a baffle plate. This process protects the filter bags from wear and allows pre-separation of coarse particles.

The dust particles are retained on the surface of the filter media and, in a subsequent step, are blown off the bags using compressed air. The separated dust falls into the dust-collecting trough, and the discharge screw continuously conveys the separated material out of the filter. The clean air leaves the system via the clean gas chamber or, if required, can be fed back into the production hall as return air.

1. Clean gas outlet
2. Clean gas chamber with jet pipes and injectors
3. Compressed air tank
4. Crude gas chamber
5. Baffle plate
6. Dust-collecting trough with discharge screw and outlet
7. Crude gas inlet
8. Maintenance opening
9. Pressure relief

VERY LITTLE MAINTENANCE AND SERVICING REQUIRED
The round IMPULS filter is a compact, high-capacity separator. It has the same cleaning system as the rectangular filter. This filter system is primarily used for high quantities of dust in crude gas.

The round filter acts as a centrifugal separator in the lower crude gas inlet area. Its design allows it to separate large quantities of material and makes it suitable for use in pneumatic conveying and central vacuum cleaning plants.

The compressed air system, control technology, cabling and filter bags can easily be accessed from outside, thus minimising downtime when maintenance work is being performed.

This plays a major part in ensuring high plant availability – one of the key benefits of this filter system, along with quick bag changes and reduced storage costs thanks to the identical construction of the spare parts.

**PROVEN PERFORMANCE**

Crude gas enters the cyclone in the lower area tangentially. The centrifugal separation method discharges the majority of the particles via the dust collection cone. The crude gas is then diverted upwards, where it flows through the filter bags and leaves the system as clean gas.

**THE ROUND FILTER**

**EFFICIENT PARTNER WITH A COMPACT DESIGN**
Control units are a key component of filtration plants from Scheuch. They are used in anything from simple extraction units to complex process dedusting systems. In conjunction with the Jet Impuls Filter, Scheuch has developed a new filter control unit – the Pulsmaster Advanced.

**SIMPLE MAINTENANCE AND OPERATION**

The new-generation device is fitted with a powerful processor and a touchscreen with full graphic display and user-friendly menu navigation. In order to avoid errors resulting from misunderstandings in a global workplace, there is a strong reliance on the use of representative symbols and images. The texts can easily be implemented in different languages at the request of the customer.

Great value is placed on simple maintenance of the control unit. So, for example, a backup copy of the settings can be saved to an external data carrier, and restored if necessary. Passwords prevent unauthorised access to the settings. Potential problems can be solved quickly by remote maintenance. In many cases, this eliminates the need for a service technician to travel to the site.

**IMPULS CLEANING SYSTEM**

**INNOVATIVE AND RELIABLE**

The IMPULS cleaning system developed by Scheuch is highly efficient and energy-saving. With a high proportion of secondary air, the specially shaped twin nozzles ensure efficient and extremely gentle cleaning. This results in low compressed air consumption and longer cleaning cycles, which in turn means that the bags last longer.
EFFICIENT FILTRATION REQUIRES EXPERTISE

With thousands of models built and shipped all over the world, the Jet Impuls Filter is one of the company’s core products. The bag filter has been part of the Scheuch product range since 1979, and has been fitted with the IMPULS cleaning system since the middle of the 1980s.

With plant availability of over 99%, the Jet Impuls Filter meets the high requirements for maximum productivity in the wood based panel industry, thanks to its robust design and the use of reliable, tried-and-tested components. The filter also benefits from 30 years of experience, which Scheuch has used to continually develop and improve the product.

TESTED FIRE AND EXPLOSION PROTECTION CONCEPT

The certified Scheuch safety concepts guarantee availability and legal compliance for the operator. They can also help to reduce insurance premiums.

Conventional fire and explosion protection measures require large safety clearances, which are often not available in practice. Scheuch has therefore developed and tested customer-specific solutions according to the installation location in question. For example, Scheuch can provide explosion protection concepts with flame ranges of under three metres if necessary. This enables the filter configuration to be adapted to particular requirements, even when space is extremely limited.

The certified, ATEX-compliant design is complemented by a report describing the limited impact on the rest of the hazard zone. Vehicle routes, walkways, storage areas and site boundaries are permitted within the vicinity of the filtration plant. The filter casings and separation distances have been tested in accordance with fire protection class EW90. A distance of one metre between the filter and the building is sufficient. This ensures maximum safety with minimal restrictions.

INDIVIDUAL SOLUTIONS FOR DIFFERENT REQUIREMENTS

The task of a filtration plant is to clean defined crude gas while ensuring safe and reliable compliance with the specified limit values for dust and pollutants.

Factors which influence the choice of the best possible filter system include:

- Composition of the carrier gas
- Particle properties and filter medium
- Mode of operation
- Filter design

The plant parameters coupled with Scheuch’s years of experience are crucial when it comes to choosing the right filter.

QUIET PERFORMANCE – INDIVIDUALLY ADAPTED

There are different standardised sound-proofing packages available depending on whether the filter system is installed in an industrial area or a mixed building area, or even if it is operated at night.