

For a clean environment!



Filter Systems- Competence for your Dedusting Technology



If one is aware of the signs, he acts sustainable.

Your partner for dedusting technology and environmental protection: The F.O.S. Group

The F.O.S. Group offers you comprehensive services related to all aspects of dedusting technology – combined with considerable expertise and personal commitment for sustainable environmental and climate protection.

Our broad and highly convincing product and service range as well as our operational readiness make us an efficient partner for the industry – from small firms to large corporations.

For a very good reason: we allow our customers to make useful process optimisations, which not only bring you tangible cost advantages, but simultaneously also make an effective contribution to environmental and climate protection. So you can therefore profit, for example, from our patented cleaning procedures for filter elements that are already installed.

Trust the experts at the F.O.S. Group – and simply place the details of your dedusting technology in our experienced hands.



We guarantee environmental protection

Environmental protection is a central topic at the F.O.S. Group. Our production and cleaning facilities meet all environmental regulations – including international requirements in accordance with ISO 14001 and ISO 9001. However, for us the protection of nature goes one step further:

As a progressive, environmentally conscious company, we attach great importance to sustainable economic activities and the careful use of resources, either through minimal emission values through the optimal use of suitable filter media or a reduced carbon footprint by avoiding unnecessary disposal.

We guarantee quality

We produce, research, develop and train! We systematically use the advantages of Germany as a business location: well-trained employees, outstanding infrastructural conditions, planning dependability and high quality standards. Those who meet high quality standards need to fulfil the mandatory prerequisites.

We know the requirements of the market. And we fulfil them in regular surveillance audits:

- Quality management in accordance with DIN EN ISO 9001
- Environmental management in accordance with DIN EN 14001
- Security management in accordance with SCC
- Waste management specialist in accordance with Art. 2 of the Closed
- Substance Cycle Waste Management Act (KrW-/AbfG)
- Occupational safety and health protection management in accordance with the legal regulations



If you care for details, you will decide for quality.



Made in Germany

First-class filter elements – Made in Germany

Quality is never a coincidence – but rather the result of careful material selection, professional processing, state-of-the-art technology and stringent inspections. Our FOS-tex® filter products meet the highest standards in every respect and therefore make a decisive contribution to the reliability and security of your installation.

We are committed to the quality seal „Made in Germany“, combining the best craftsmanship traditions with innovative ideas and concepts. You can rely on our high production and service standards.



Filter products

We manufacture individual and customised filter tubes, bags and cartridges from a wide range of materials, including PES, PP, m-aramid, glass, PI, PPS and PTFE.



Filter media optimisation

In order to extend the life cycle of your filter media and optimise your dedusting process, our in-house laboratory is at your disposal with a comprehensive range of services.

We would be pleased to support you in selecting your materials and also systematically improve the durability of your filter media through various impregnations and coatings.

Using premium materials leads to premium results.



Top-quality, high-performance, cost-effective: F.O.S. baghouse accessories



In addition to our products and services, we also offer a comprehensive range of accessories – naturally with a very high level of quality and flexibility. We manufacture all the accessories for you in a large range of materials and designs – in line with your individual needs.



Air-conditioning technology and air filter pads

- Our product range is rounded off by:
- Cut-to-size air filter pads for reliable removal of coarse dust
 - Pre-filters for clean room filter units
 - General air-conditioning technology
 - All classes of coarse and fine dust filters related to ventilation and air conditioning



Support cages and displacement inserts

Support cages and displacement inserts made of steel (with or without surface treatments), ranging to high-grade and particularly chemically resistant duplex stainless steel or nickel alloys, supplement our accessory range.

Filter cartridges/filter panels

Customised FOS-tex® filter cartridges enable the enlargement of the effective surface area, and simultaneously a very compact design. With filter efficiencies of up to 99.99%, they are particularly suitable for use in critical applications that create very fine dust, for example. The conversion of filter tube/support cage systems to cartridges is possible for most standard installation types.

Leak detection system: F.O.S. Fluorlight

For system leakages, F.O.S. Fluorlight is a particularly effective powder for leak detection in your dedusting installation. We would be pleased to conduct this service for you – just ask us.



Cleaning regularly keeps things in place.



Why exchange Filter Media, if it can be done cheaper and faster?



If the differential pressure in your facility is rising, this is a strong indication for „clogged filter media“. There can be various reasons for this. Exchanging the filters is usually connected with an expensive stop in production.

The solution here is to clean the filter elements while they are still installed. Our cleaning methods are patented and thus unique, offering you a range of advantages.

F.O.S. On-Line Cleaning®

The cleaning method for vertically installed filter tubes or filter cartridges results in an efficient, thorough and secure removal of dust on the surface and in the depth of the filter media. This procedure is possible without stopping the production process (n-1 operation). F.O.S. On-Line Cleaning® offers enormous advantages from a technical and economic point of view:

- No costs for deinstallation and reinstallation
- No stop in production (n-1 operation)
- Up to 80% cost reduction, as compared to the installation of new filter tubes
- The support cages are not removed
- No waste disposal costs
- Increase in lifetime and reduction of differential pressure by removing dust in the depth of the filter
- Dust remains in the waste disposal cycle
- Conservation of environmental resources

F.O.S. Pulse Cleaning®

We also offer a patented cleaning method for horizontally installed filter tubes and bags while they are still installed.

F.O.S. Power Cleaning®

High-intensity cleaning of vertically installed filter tubes to remove the surface dust.

Tumble dry and tumble wet cleaning

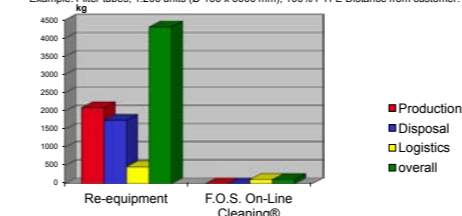
F.O.S. tumble dry cleaning for dust caking and encrustations and F.O.S. tumble wet cleaning for water-soluble salt encrustations are further time-tested methods to reliably clean filter media. Cleaning can either be performed at your production site with a mobile system or in-house at our plant.

Naturally, as a certified waste disposal specialist, we dispose of all the dust and wash wastewater in a professional and environmentally compatible manner.

We would be pleased to provide references upon request.

Environmental performance evaluation for F.O.S On-Line Cleaning® Re-equipment versus cleaning

Example: Filter tubes, 1.200 units (Ø 160 x 6000 mm), 100% PTFE Distance from customer: 500 km



Reduction of the CO²-emissions by 4,2 tons (97%)!

Comparison: new investment versus cleaning Example: waste incinerator, Spain

New investment

2.048 P84 filter tubes à 71,00 €/piece	145.408 €
Costs for de- and remounting (Cost for downtime)	16.384 €
Total	160.000 €

Overall costs for new investment	321.792 €
Overall costs for F.O.S. On-Line Cleaning®	52.960 €

Cost savings incl. downtime (84 %): 268.832 €

excl. downtime (67%): 108.832 €



Demand-oriented installations increase efficiency.

Customised filter installation construction

We are experienced specialists for industrial air filter and dedusting installations and also provide our entire range of expertise in constructing completely new and modern facilities.

As your partner for customised and highly productive dedusting installations, we will design a custom-made and efficient solution from A to Z for each of your particular applications. Additionally, we offer a full range of spare parts, maintenance and other services for your installations.

In this way, you receive an end-to-end service, which optimally supports smooth and economic operations. What's more, we also upgrade both our own and third-party installations.

We serve the following industries, among others:

- Chemicals/pharmaceuticals
- Industrial minerals, cement, cera
- mics
- Wood
- Metal processing
- Foundries

Our product range

We serve the highly different requirements of these industries based on our comprehensive experience, which we have been able to gain through our long-standing service and maintenance activities. We have constructed nearly every filter variation, from pocket filters in stainless steel designs with explosion protection to zinc-plated bag filters with vibrating dedusting. We design systems with various air filter combinations for extraction walls, exhaust air recirculation and supply air, as well as for the process air

from chemical manufacturing processes.

Cyclones, scrubbers and other separators are used in our systems when pre-filters are necessary or filters are ruled out for technical reasons.

Components of our installations include:

- Pocket, cartridge and bag filters
- Impact separators, centrifugal separators and scrubbers
- Oil and emulsion mist separators
- Air supply and exhaust systems, exhaust air recirculation, intake filters for process air
- Work cabins, work desks, extraction elements and dust transport
- Pre-coat and sorption systems

Turnkey installations

Based on your requirements and preferences, we will plan, develop and install your dedusting or air filter installation, including all required pipelines, enclosures and exhaust and soundproofing facilities. We always provide for perfectly matched services. All installation components are adapted by us individually in line with your needs, so that you can start operating your turnkey facility immediately.



Our well-founded expertise and broad range of experience support you in optimising the environmental and climate protection of your production in a targeted and effective manner.





Keeping in shape improves performance.

Service under compliance of all Guidelines for Operational Safety and Health Protection

Systematic prevention is the best strategy to ensure the optimal performance of your installation – while also making a decisive contribution to optimal environmental protection. We are experienced professionals in the field of dedusting technology and we place our entire range of services and expertise at your disposal.

The focus is always on fast and competent service, with all that this entails: planning, logistics and installation.

We thus make it possible for you to save on high expenditures of time, cost and effort. In this manner our services ensure your productivity and help you to make an effective contribution to environmental protection – 24 hours a day, 365 days a year.

Service and inspection

We monitor and inspect all types of filter installations and carry out necessary maintenance work directly, thus keeping the availability of your installation at a high level of performance.

Maintenance and repair

Based on a situation appraisal, as well as operational analysis and troubleshooting, our team helps to keep your installation in shape for the future. Furthermore, our maintenance and repair concepts enable you to recognise and utilise cost-cutting potential.

Conversion and optimisation

We help you to permanently reduce operating costs and increase the productivity of your installation. Our engineers will design detailed refurbishment, optimisation and conversion concepts that provide real added value.



Emission measurement

We carry out emission measurements for operational purposes at your filter installation. You will receive an analysis, as well as an informative report.

Dismantling and reassembly

Our highly qualified and experienced team is available for all assembly work within your entire filter installation – even on large construction sites and naturally also for very tight time frames. Our staff is regularly retrained in order to provide fast, professional and reliable high-performance services coupled with smooth operational procedures.



Shaping a better future with professional resource management



Your contribution to environmental and climate protection



disposal in a hazardous waste container



batch-feeding a waste recycling installation



cleaning installation



cleaning installation

As a committed and future-oriented environmental technology enterprise, the F.O.S. Group concerns itself with two central challenges of our time: climate and environmental protection, as well as the preservation of resources.

Ultimately, natural sources of raw materials cannot be used for an unlimited period of time. In contrast, recycled raw materials can be. For this reason, we adhere to Art. 4 of the German Life-Cycle Resource Management Act (Kreislaufwirtschaftsgesetz):

“Material recycling takes priority over the thermal recycling”

We offer you regenerated filter materials made of PI, PPS or PTFE. These materials are prepared in waste treatment plants made especially for this purpose and are authorised in accordance with Art. 4 of the Federal Immission Control Act (BImSchG) so that they can be reintroduced into commercial circulation.

Your benefits:

You protect the climate and the environment by avoiding CO₂, which would otherwise be generated through thermal recycling. You conserve valuable resources. You reduce costs, as the use of regenerated filter materials is exceptionally economical for you. You receive high-quality materials. Using comprehensive analysis

methods in our laboratory, we ensure that the test values of our regenerated filter materials are equivalent to those of new materials.

Everything from a single source!

As a certified waste management specialist, we also offer you a reliable partnership for the safe and correct handling of dangerous and non-dangerous waste materials. We dismantle defective filter elements from your installation and dispose of them in a professional and environmentally friendly manner.

As a further service, we also offer you a return system that is adapted to your needs:

- We will deliver the new filter media to you.
- Simultaneously, we will take back your old filter tubes, in order to dispose of them at the highest level of environmental protection.
- Naturally, this includes the accompanying logistics.



For a clean environment!



You can trust us.

- cost-cutting cleaning methods
- removal and assembly of filter elements
- professional waste disposal
- turn-key installations
- service and inspections
- laboratory services
- installation conversions
- production of filter elements
- accessories, e. g. filter cages, solenoid valves, venturis, control devices, leak-detection powder

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