

**Complete customized systems solutions
for filter housings and air quality management**



Industrial Filtration | System Solutions & Services | Engineering

Complete filter housing construction

from design and build to operational servicing

Providing superior solutions

Viledon® Engineering are specialists in the new build, retrofitting, renovation and servicing of filtration installations. With many years of experience in the design and build of cutting-edge filtration plants, we are able to offer a complete, end-to-end service, from initial feasibility studies through to training and operational maintenance programs.

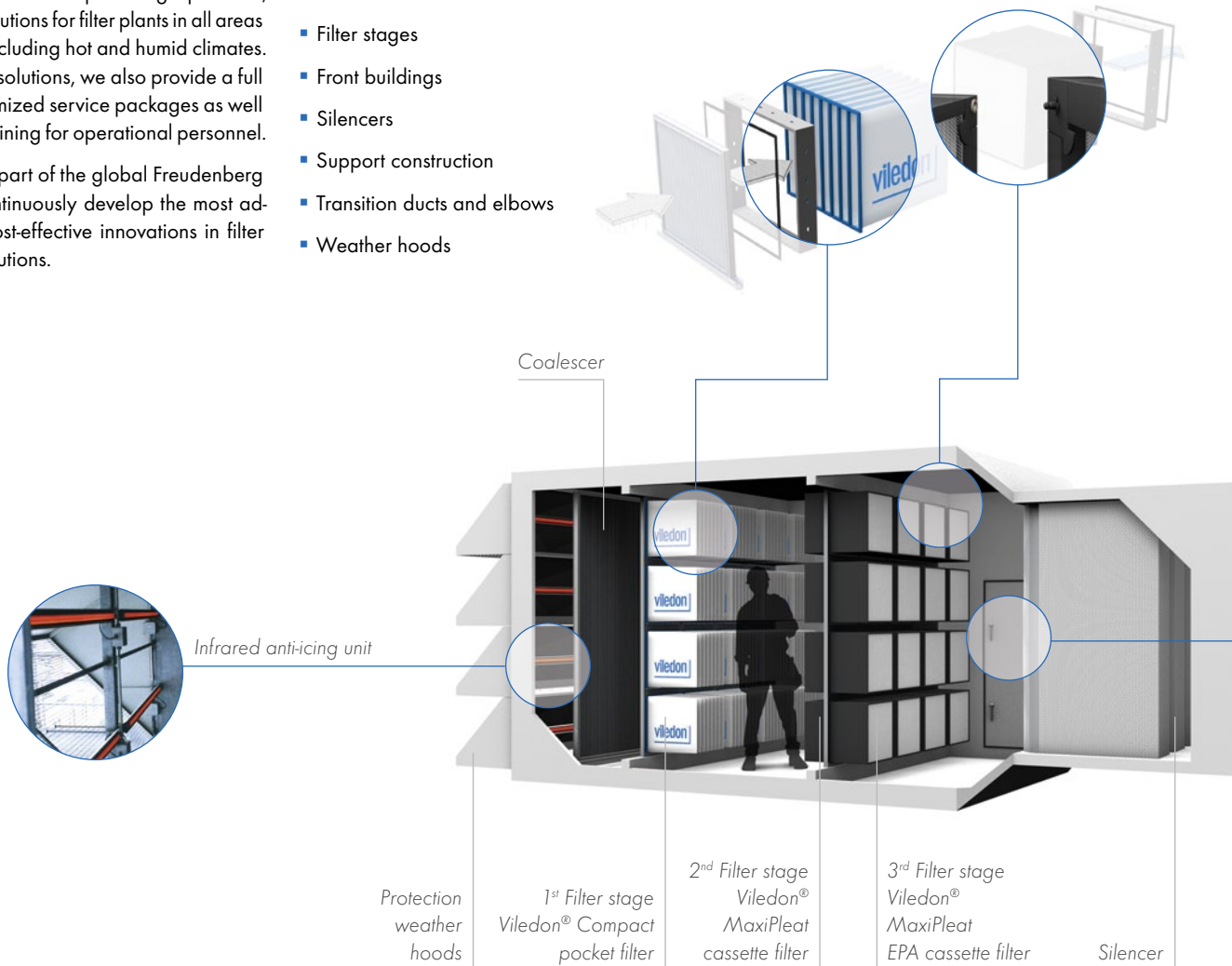
We are experienced in providing optimized, cost-efficient solutions for filter plants in all areas of the world, including hot and humid climates. To support our solutions, we also provide a full range of customized service packages as well as specialist training for operational personnel.

In addition, as part of the global Freudenberg Group, we continuously develop the most advanced and cost-effective innovations in filter technology solutions.

A complete engineering portfolio

No matter what the scale of your project is, we can take care of the whole filter housing plant, including:

- Anti-icing systems
- Cooling air system
- Electrical equipment
- Fans
- Filter stages
- Front buildings
- Silencers
- Support construction
- Transition ducts and elbows
- Weather hoods



A typical Viledon® filter house solution, showing the filtration stages and filter types.



Service access



Expansion joint

Discover more about our full range of services on the following pages.

Viledon® Engineering

Construction

01 Retrofitting/ New build

- Comprehensive status quo analysis
- Complete cost analysis
- 3D CAD models to illustrate the concept
- Customized end-to-end solutions
- Standardized modular filter system components
- Small to large turn-key installations
- Final on-site inspections
- Close coordination with our customers

Operations services and support

02 Viledon® filters & spare parts

- High-quality Viledon® filters
- Full range of spare parts

03 Comprehensive service support

- "Repair or replace" concept
- Inspections
- Measurements
- Maintenance programs

04 Key personnel training

- Choice of training courses and technical tours

Expertise and services

Accurate planning, long-term success



01 Retrofitting / New build

As well as all aspects of design, specification and engineering, Viledon® Engineering provides a full fabrication and construction service. This includes “turn-key” handover and full post-project monitoring and reporting.

In addition, our wide experience in the field enables us to analyze and solve all problems surrounding air filtration performance. These range from identifying physical defects in your existing plant to providing a detailed assessment of current filter performance.

We are then able to make recommendations on the basis of the best available technology. Our solution can be anything from modification, repair or retrofitting, to designing and building a complete new installation.

Key features

- Full analysis of existing filtration system, together with recommendations for remedial actions
- Assessment of current performance and accurate projection of improved performance potential
- Repair or replacement option if technically and commercially viable
- Complete fabrication, transportation and construction of any standard components or a fully customized solution
- Optional manpower and supervision services for “turn-key” installations
- Following project completion, we verify improvements through reports, measurements and monitoring

02 Viledon® filters & spare parts

Our systems are designed to run at optimum levels using genuine Viledon® filters and field-tested spare parts. By using the components specified for your solution, you will maximize both performance and return on investment. Using inferior filters will reduce your system’s effectiveness, resulting in higher energy costs, reduced filtration efficiency and longer amortization.

Key features

- Wide choice of products for a perfectly balanced solution
- Low pressure drop with outstanding particle collection efficiency
- Superior working life and longer maintenance intervals
- Full range of spare parts helps eliminate unplanned down-time
- Maximized performance leads to optimum Return On Investment (ROI)



03 Comprehensive service support

To ensure that your solution continues to work at optimum levels, we offer a full range of service support packages. The service plan you choose will be especially designed for you, ensuring that you get everything you need and nothing you do not.

04 Key personnel training

To support your own team in the efficient day-to-day running of your installation, we provide comprehensive training programs run by Freudenberg Filtration Technologies professionals. The more your operational team understands about how to get the best out of your filtration system, the more value you can create. Value through enhanced energy efficiency. Value through increased output. Value through improved total cost of ownership.

Key features

- Prevents unscheduled down-time and maximizes scheduled maintenance outcomes
- Includes site inspections, measurements, maintenance programs and "repair or replace" concepts
- Helps eliminate potential defects before they become costly problems
- Reduces running costs and boosts profitability
- Fixed budgets give maximum cash-flow control

Key features

- Choice of training courses and technical tours
- Practical experience blended with theoretical understanding
- Ensures that your team have the technical and practical knowledge to get the best out of your Viledon® Engineering solution

How we work

A structured approach to delivering the perfect solution



Working to your brief

Every Viledon® Engineering project begins with a thorough understanding of your specific requirements. At this stage, we are able to contribute valuable insights and suggestions based on our specialist knowledge of the latest developments in filtration technology.

Client benefits

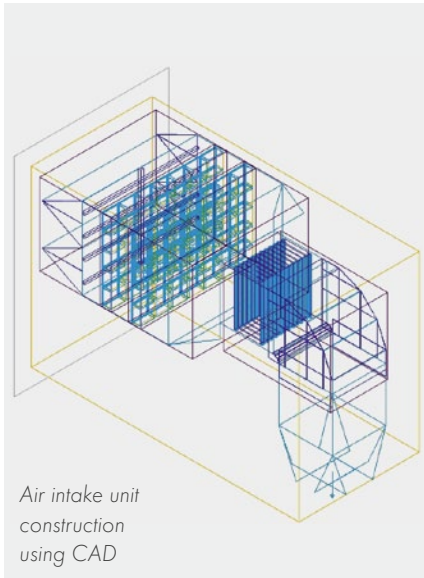
- Close understanding of your specific needs
- Knowledge-sharing and advice to create the best possible solution
- Dedicated project management for the entire process: design, engineering, delivery and operations

Analyzing the “now” situation

Fully understanding your current position is key to creating the perfect solution. We analyze every aspect of your existing filtration system to establish precisely where our knowledge and your budget are best invested.

Client benefits

- Detailed inspection and logging of your existing air intake system
- Identification of any particularly challenging areas or issues
- Joint evaluation, with you, of what needs to be constructed, repaired, replaced or retrofitted



Air intake unit construction using CAD

Worldwide reach

Viledon® Engineering operates across the globe. With international experience in designing and building customized air intake systems, as well as operational services and support, we can deliver reliable and efficient solutions anywhere in the world.

For more information, please visit www.freudenberg-filter.com



Viledon® Engineering Hubs

- Brazil, Jacareí
- China, Suzhou
- Germany, Weinheim
- India, Pune
- Mexico, León
- South Africa, Johannesburg

A fully customized solution

Because our expertise extends from engineering the parts you need, right through to specifying the appropriate filters, we offer a fully customized solution. This is not an added extra; it is an intrinsic part of our service.

Optimum filter performance is essential

Any filtration installation is only as good as the filters you use. Freudenberg filters are at the cutting edge of filtration technology. Thanks to our expertise in nonwovens and filtration technology, our filters provide optimum performance throughout their life cycle, last longer and meet all the most demanding regulations and guidelines on air quality.

Client benefits

- Exact knowledge of your needs enables us to create a custom solution
- 3D CAD models used to illustrate our designs
- Complete cost analysis for project transparency
- Close coordination with you during the engineering phase

Choosing a Freudenberg filter system solution means:

- Improved filter efficiency
- Increased filter lifetime
- Reduced pressure drop
- Enhanced energy efficiency



Freudenberg Filtration Technologies

a partner you can rely on



Freudenberg Filtration Technologies develops and produces superior filtration solutions, which improve the efficiency of industrial processes, save resources, protect people and our environment and enhance the quality of life.

Freudenberg filters are used successfully for intake, exhaust and recirculating air filtration in many industrial applications. These include production, office and residential ventilation, the transport sector (rail, marine, aviation), power systems, healthcare, pharmaceutical, the food and beverage industry and cleanroom environments. Freudenberg Filtration Technologies also provide advanced solutions for the demanding area of liquid filtration.

In the human protection sector, we provide filter solutions for office equipment, air conditioning systems, respiratory masks, vacuum cleaners and other technically challenging applications. As a development partner and manufacturer for the automotive industry, Freudenberg Filtration Technologies produces cabin air filters and engine intake air filters.

A customized range of system solutions (e.g., the design and construction of filter houses) and dedicated service and training packages complement our comprehensive product portfolio.

For more information, please visit

www.freudenberg-filter.com



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