

# Viledon Filters for Emission Control

## Dust Extraction That Works



### The Air



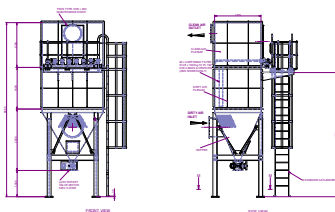
In many industrial processes dust is generated. Examples are dust from smelter furnaces, foudries from material handling of powders in mining, steel, food, or pharmaceutical industry, welding fumes, etc. Depending on the material and the process the concentration, the particle size and the chemical composition of the dust may vary substantially. Also, the chemical composition of the dust and with that the toxicity of the dust can be very different. Finally, the temperature of the air extracted has a high impact on the filtration system required.

### The Problem



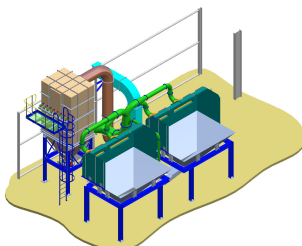
When dust is generated in industrial processes it must be extracted from the point of source to avoid damage to human beings and machinery e.g. by penetrating into motors, sealing, bearing, thus deteriorating processes and product quality. Sometimes dust particles need to be recovered and recycled into the process due to their high value. Most of the time, dust particles from industrial processes cannot be released to the atmosphere due to their impact on the environment. Therefore, a reliable extraction and collection system for dust is needed.

### The Concept



Such a system implicates the extraction of the dust from the point of origin, the handling of the dust loaded air and the cleaning of the dust particles from the air through an appropriate filtrations system before releasing it into the atmosphere or recycle it. The filtration is done through a reverse-pulse filter system that is equipped with self-cleaning filter cartridges or filter bags. Automated pulsing of the filters rejects the dust from the filters and releases it into a material handling system.

### The Solution



Freudenberg is your one-stop source in emission control. From the manufacturing of the filter elements through to the design, manufacture, installation and commissioning of complete dust removal units, we have all the know-how required to meet the requirements of your application. This also includes the retrofitting of existing dust plants with Viledon filter cartridges to optimize the performance, the refurbishment of old units, and the supply of spare parts.

## The Products



### Viledon Filter Cartridges and Filter Bags

Viledon filter cartridges are known in the market for outstanding performance, both in terms of cleaning efficiency, easy-drainage properties, low pressure drops, high mechanical strength and long lifetime.

- Filter media made out of full surface thermally-bonded nonwovens; antistatic, corrugated, or PTFE finish possible
- DIN cartridges with integrated inner support cage available in Ø 200mm 327mm, and 360mm and different length
- Twist & Fix cartridges with removable inner support cage available in Ø 145mm, 156mm, 218mm and 324mm and different length



### Pneumatic Components, Timers, and Accessories

- Re-usable support cages and air flow optimized pulse-jet deflectors
- Corrosion-proof solenoid valves, blow pipes, pressurized air tanks
- Differential pressure or time controlled cleaning timers in different sizes with easy step-through programming



### Custom-Made Emission Control Units

Freudenberg has a long track record as a manufacturer of dust extraction and dust control systems.

- Individual design and component selection to meet your requirements
- Fabrication, installation and commissioning
- Turn-key project management
- Supply of replacement cartridges and spare parts

## The Service



Our services comprise

- Conceptualization of emission control solutions
- Optimization of existing dust plants
- Maintenance contracts for our own plants and other manufacturers
- Filter change-out and refurbishment of existing plants

## Contact:

### Gauteng

P.O Box 147, Isando, 1600  
Phone: (011) 929-4500  
Fax: (011) 392-2116

### Spartan

76A Rigger Road, Spartan  
Phone: (011) 394 3314  
Fax: (011) 394 3314

### Kwazulu- Natal

P.O Box 4953, Durban, 4000  
Phone: (031) 206-0470/3  
Fax: (031) 206-0295

### Mpumalanga

8359 Manie Maritz Str. Secunda  
Phone: (017) 631 5466  
Fax: (017) 631 5466

### Western Cape

P.O Box 3903, Cape Town, 8000  
Phone: (021) 933-3501  
Fax: (021) 932 6515

e-mail : [viledon-filters@freudenberg.co.za](mailto:viledon-filters@freudenberg.co.za) Internet: [www.freudenberg-filter.co.za](http://www.freudenberg-filter.co.za)

