



Clear the way to air
filtration technology

The best air revolves around people.

To make a working environment efficient and truly positive, it is essential to breathe the right air.

It is not just a common saying: the quality of the air greatly changes the productive results in any area; improving the air means not only breathing better and protecting workers' health, but also working in a cleaner environment, which generates fewer safety problems, where fumes and particles wear out much less the technologies associated with production processes.

Proper filtration brings long-term indirect benefits which are reflected in a multitude of factors, for example by reducing the maintenance costs of machinery that is less obstructed by polluting particles, or further reducing the risk of accidents due to poor visibility.

2013

FOUNDATION



Originally created in the 90s as a Business Unit of a company working in the field of air and dry smokes filtration, in 2013 it detaches and becomes independent, creating its own identity. Thus Hfiltration was born.

2014

GROWTH

The next two years are of adjustment: Hfiltration finds its own balance; it structures in a systematic way laying the foundations for what will be the growth of the following years.



2017

RESTYLING



An important engineering and aesthetic restyling of the products is carried out: new company colors are used which lighten the appearance of the filters and increase their recognition within the companies.

2019

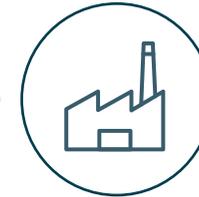
HUMAN & FRIENDLY

Hfiltration launches Human & Friendly, the brand that signs all green initiatives: because attention to the environment is reflected not only in the products but also in the company's attitude.



2020

HFILTRATION GROUP



Hfiltration evolves and becomes Hfiltration Group: acquires HFPolska and HF Swiss, increasing its capillarity in Europe to be even closer to Partners and companies.



Each company has its own characteristics and problems. Hfiltration is well aware of this because it has always been committed to analysing, designing and installing customized filtration systems capable of purifying the air of industrial working environments in multiple sectors.

We are an Italian company that produces on Italian soil and exports internationally. We treat each company on a case-by-case basis, analyzing the needs and customizing the solutions.



We are a group
with an Italian heart
and a European identity.



HF SWISS

HF POLSKA





Our customers are spread all over the national territory,
European and also international.

Our Italian heart remains the center of **HFiltration Group**,
a reality that developed in 2020 by incorporating two partners who over the years have
collaborated in a precious way on the European territory: **HF Polska** and **SFS Swiss
Filtration System** which with the acquisition changed its name to **HF Swiss**.

HFiltration has never been satisfied with just being a supplier, and with the new structure
it becomes a widespread reality on the territory, capable of combining experience and
innovation.

Despite the name "Group", **HFiltration does not forget its roots as a SMEs**, which stand
out for its care and the attention tailored to each individual customer.



We do not have customers, We have partners.

In Hfiltration we build relationships; for us, each company is more than just a customer: **it is a partner with whom we can collaborate to optimize working conditions.** Our priority is to build a relationship of trust over time.

Thanks to our highly qualified consultancy and assistance, our technical staff is able to listen to the real needs of each company to find the best tailor-made solutions.

Vision

We help companies to actively, consciously and constructively protect people, production and the environment inside and outside the plants, both through our products and by supporting a culture of sustainability and attention to nature.

Mission

We create air purification and filtration systems to protect the environment, we interact with the customer to provide an attentive, punctual and tailored service with respect to his needs. A commitment that is realized not only in the design phase, but also in the after-sales, creating a real stable relationship over time.





🌐 **humanfriendly.it**

Green: a way of living.

HFiltration filters reduce pollution, improve the environment of the companies which we produce them for and respect the environmental and safety standards currently in force. **All our systems have ISO and BHSAS certifications.**

Our commitment to the environment is not limited to this.

All our products are designed to impact the environment as little as possible and each internal production cycle is carried out in order to recycle as much as possible while consuming the minimum.

Every single aspect of corporate life is designed to encourage the employees to pay more attention to consumption and the effects on climate and nature.

We have also launched a series of **initiatives under the name "Human And Friendly", which aim to make our partners and all our contacts aware of the issue regarding the respect for nature.**

For us "green" is not just a productive environment, it is a real philosophy imprinted in the DNA of our company and in the corporate governance.

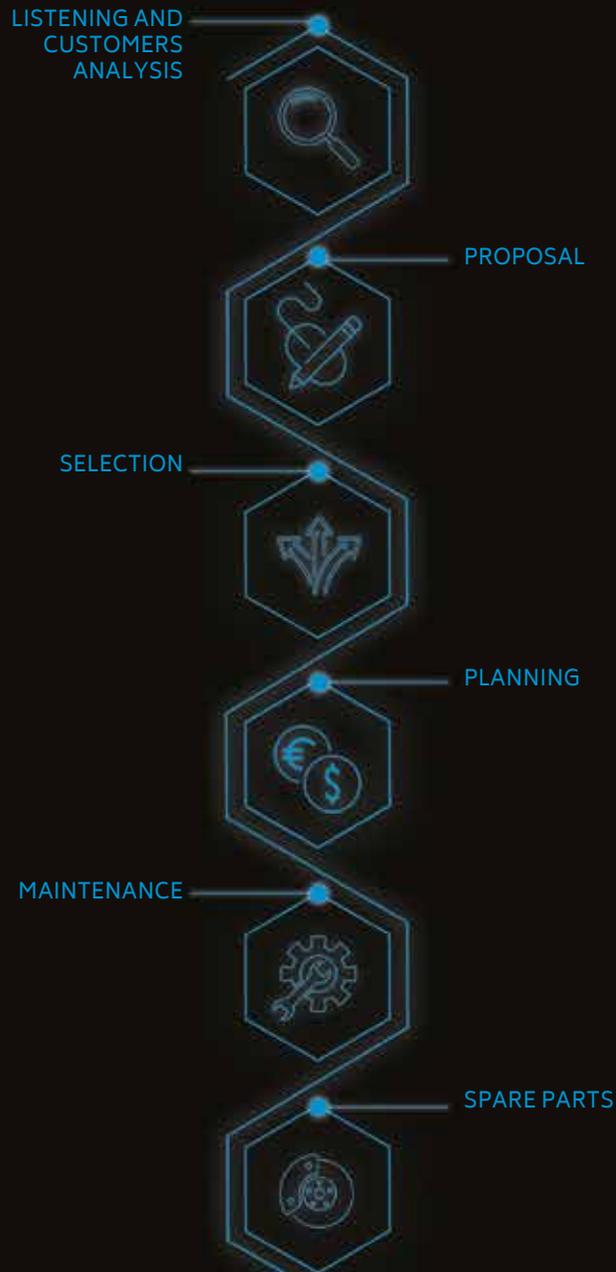




Certifications

HFiltration is **ISO 9001** certified for the quality of all internal processes. **BS OHSAS 18001** is the Occupational Health and Safety certification regulating the protection of workers and processes we abide by.

Our services



From engineering to after-sales: each contact area is important.

Hfiltration does not offer standardized solutions; for us each partner represents a challenge and a problem to be successfully solved.

We design, supervise, manufacture, install and deal with after-sales assistance on each of our products.

Nothing is left to chance: from the moment of the first contact, from design to after-sales, Hfiltration is present for every need of each customer, balancing every intervention in perfect harmony with the real needs of each company.

We offer:

- > Technical planning and drawing
- > Technical and commercial advice
- > V.O.C. specialist advice
- > Technical inspections
- > Continuous technical assistance
- > Telephone technical support advice
- > Reconditioning and improvements
- > Foundation checks and structural load verifications

Customization

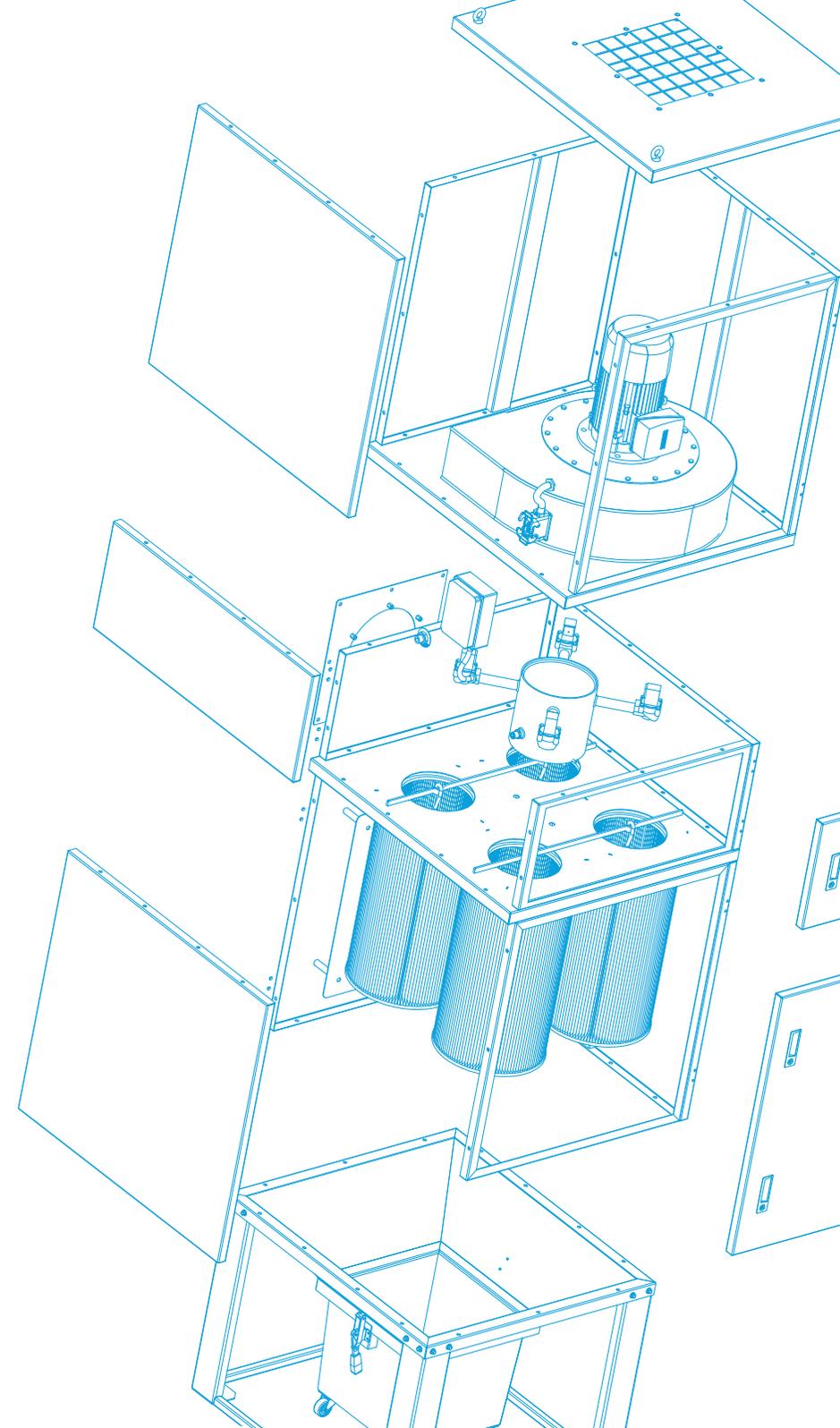
Each customer has different needs, which is why it is important that the answer is tailored.

In Hfiltration we offer a highly customized service.

We support the customer from the very beginning with an on-site inspection in order to be able to offer the best technical and economical solution.

We offer two types of customization:

- > **Product customization:** we create special machinery, sized according to actual needs, using special components, with ad hoc sized filters.
- > **Plant customization:** we design the filtration system, the layout of the pipes and study the collection points so that everything is balanced and provides maximum efficiency.



Maintenance

The quality of a filtration system is also given by maintenance, control activities, repairs and necessary overhauls with which the efficiency of the system is ensured.

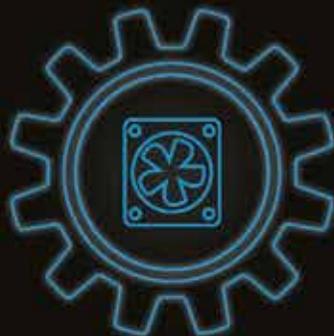
In Hfiltration we offer three types of maintenance:

- > **Preventive Maintenance:** it is an instrumental and mathematical analysis studying the parameters of the system. It can also be done remotely thanks to the installation of special softwares. At the end, a detailed report is released allowing you to plan the next intervention.
- > **Ordinary maintenance:** it is a programmed maintenance in which worn parts are replaced and normal performance levels of the plant are restored. Filter elements, sleeves, baskets, panels, cartridges, seals are generally replaced.
- > **Extraordinary Maintenance:** it concerns interventions on structural damage and damage caused by negligence or unforeseeable events. They generally concern the replacement of components such as motor, electrical parts, ventilators.

In order to optimize the functioning of a plant we have structured a service plan that offers:

- > Maintenance programs
- > Cleaning of filters units
- > Cleaning of suction ducts and pipes
- > Replacement of filter elements (cartridges, panels and sleeves)
- > Replacement of faulty/worn parts
- > Chimney emissions controls
- > Structural checks
- > Speed, pressure and temperature controls

These simple steps guarantee an efficient and effective air filtration system over time.



Spare Parts

Each Hfiltration system is identified by a serial number that allows us to trace the type of customization and detail of the components. This guarantees a very high level of assistance.

We have the spare parts of our machinery in stock, but also those of other brand plants. This is because we really offer 360 ° assistance.

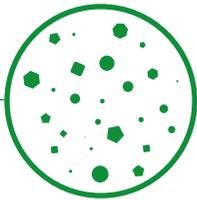
In case of need, we also customize the spare part, restoring each system to normal efficiency levels.

All spare parts are certified to guarantee the quality and origin of the piece.

New air in the world of filtration.

Hfiltration deals with the design, construction and installation of industrial filters dedicated to **dry fumes and dusts, oil mists and volatile organic compounds.**

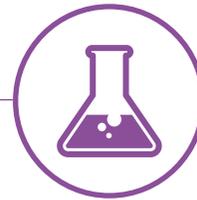
All our plants are planned and designed to meet the specific needs of each individual company.



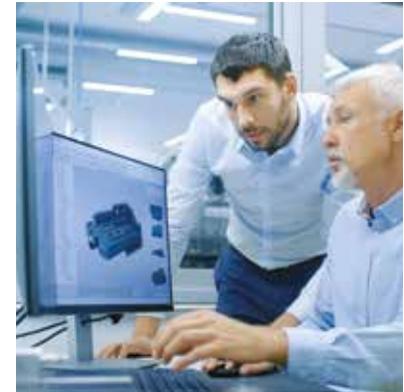
**DUST AND
DRY SMOKES**

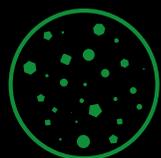


**OIL
MIST**



**VOLATILE ORGANIC
COMPOUNDS**

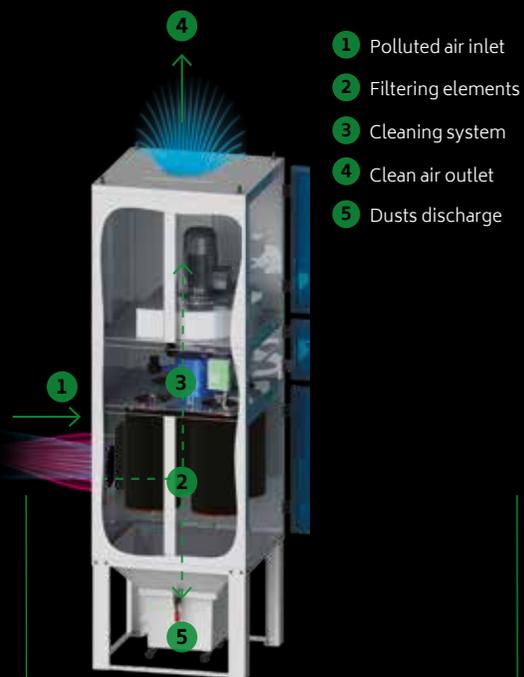




Dry filtration clears the air.

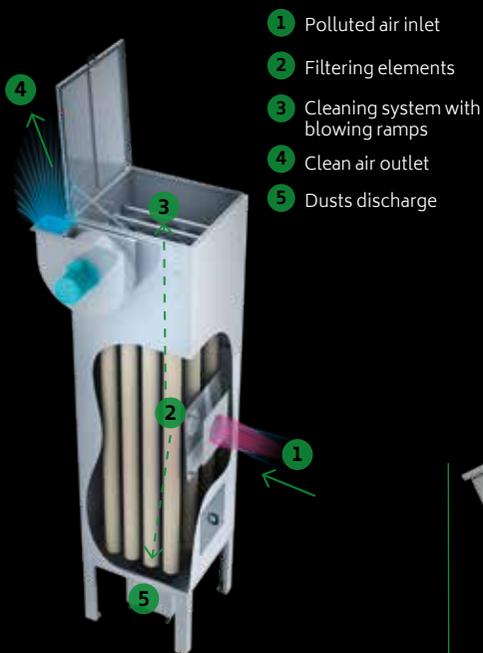
Dry filtration systems exploit the principle of physical separation of dust. The classification of the powders by type, granulometry and concentration allows to choose the best filtration system, the suitable dimensions and the type of technology most suitable to solve the problem.

HFiltration uses four different technologies to solve dust and dry smokes filtration problems:



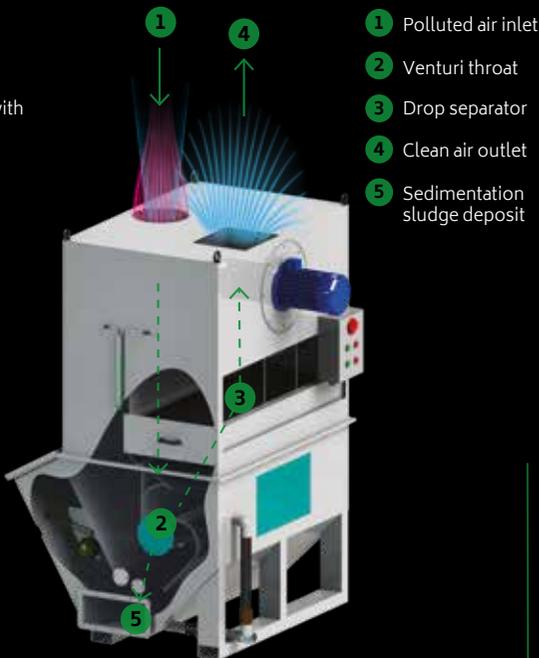
Cartridge filters

The fluid to be treated meets a series of filtering cartridges that separate the pollutant from the air. The permeability of the cartridges is such as to let the gas pass, but not the dust.



Bag filters

The fluid to be treated meets a series of pocket filters (bags) that physically separate the pollutant from the air. The permeability of the bags is such as to let the gas pass, but not the dust.



Hydrodynamic filter

The separator element is water, which traps the contaminant turning it into mud. Water facilitates dust collection and/or absorption of various gaseous substances.



Cyclonic separator

The filtering principle used is the centrifugal force: only the powders with a larger particle size are retained. It is a pre-separator system that is generally combined with another filter.

Cartridge filter PULSATRON COMPACT®

The Pulsatron Compact® range includes compressed air self-cleaning high efficiency cartridge filters that can solve all dry filtration problems.



Machine tools dry processing



Chemical processing



Pharmaceutical processing



Plastics processing



Plasma cutting



Grinding



Sandblasting



Marble cutting



Concrete



Charcoal



Welding



Epoxy painting



Silo venting



Deburring

Cartridge filter PULSATRON COMPACT® ATEX

Pulsatron Compact® ATEX modular cartridge filters have been designed and manufactured to ensure adequate application in ATEX qualified environments.



Food processing



Aluminum/zinc machining



Chemical processing



Pharmaceutical processing



Powder painting



Charcoal



Generic dust with presence of sparks

Cartridge Filter PULSATRON COMPACT® MINI

The Pulsatron Compact® Mini is a small-sized self-cleaning cartridge filter particularly suitable in application where the suction point is not fixed.



Small machine tools dry processing



Welding



Metal cleaning



Sharpening



Polishing



Shot blasting



Grinding



Sandblasting

Suction Bench PC® BENCH

PC® Bench is a range of suction benches designed to guarantee a work area that protects operators and the production environment, in presence of fumes or dusty materials.



Grinding



Frosting, smoothing, edging



Welding

Cartridge Filter PC® CART

The range PC® Cart includes compressed air self-cleaning high efficiency cartridge filters that can solve all dry filtration problems.



-  Chemical processing
-  Pharmaceutical processing
-  Welding
-  Thermal cutting
-  Concrete

Cartridge Filter HJL CART

The HJL Cart cartridge systems are made of S275JR steel in thicknesses suitable for working with very high air flow rates.



-  Storage, handling of dusty solid materials
-  Dry machining
-  Chemical processing
-  Pharmaceutical processing
-  Plastics processing

-  Grinding
-  Sandblasting
-  Deburring
-  Welding
-  Epoxy painting
-  Concrete

Horizontal cartridge filter PULSATRON H

The Pulsatron H cartridge filter is a modular Pulse-Jet self cleaning dust collector, with pneumatic cleaning of the cartridges by means of counter-current compressed air jet.



Contaminated, toxic, dangerous environments



Food processing



Laser cutting



Plasma cutting

Hydrodynamic filter IDRODUST COMPACT®

The Idrofust Compact hydrodynamic filter is a hydrodynamic dust, vapour and gas suppressor that uses the effect of micromixing the gas to be treated with water.



Water soluble gaseous flows



Various processing



Sandblasting



Metal satin finishing



Generic powders with presence of sparks



Polishing

Cyclonic separator PC® CYCLONE

The PC® Cyclone is a centrifugal pre-separator, i.e. a filtration system that allows the purification of air from dusts using the principle of centrifugal force.

 Storage, handling of dusty solid materials

 Dry machining

 Chemical Processing

 Pharmaceutical processing

 Aluminun/zinc machining

 Food processing



 Grinding

 Sandblasting

 Deburring

 Marble cutting

 Epoxy painting

 Concrete

 Charcoal

Bag Filter BAG COMPACT®

The Bag Compact® range includes high efficiency modular bag filters with an optimized layout in terms of overall dimensions.

 Storage, handling of dusty solid materials

 Pneumatic transport, mixing, weighing of pulverulent solid materials

 Polishing

 Sandblasting



 Frosting, smoothing, edging

 Fusion of metal materials, glass

 Combustion of solid materials and wastes

 Drying of solid or assimilated material

BAG FILTER HJL BAG

The HJL Bag filters series are made of S275JR steel, in thicknesses suitable to work with high dust loads, outdoor installation and 24h/day operation.



Storage, handling of dusty solid materials



Pneumatic transport, mixing, weighing of pulverulent solid materials



Sandblasting



Frosting, smoothing, edging



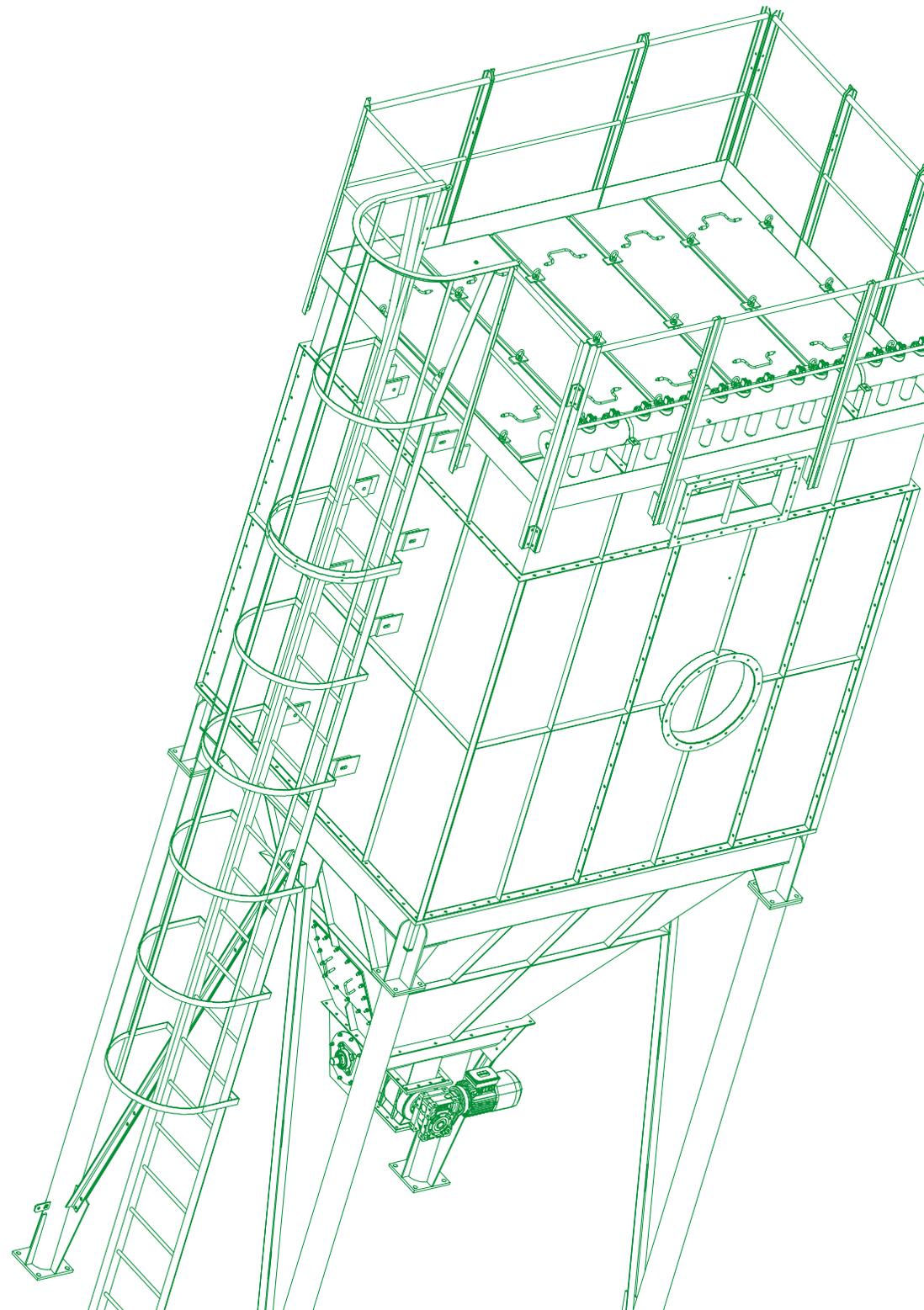
Fusion of metal materials, glass



Combustion of solid materials and wastes



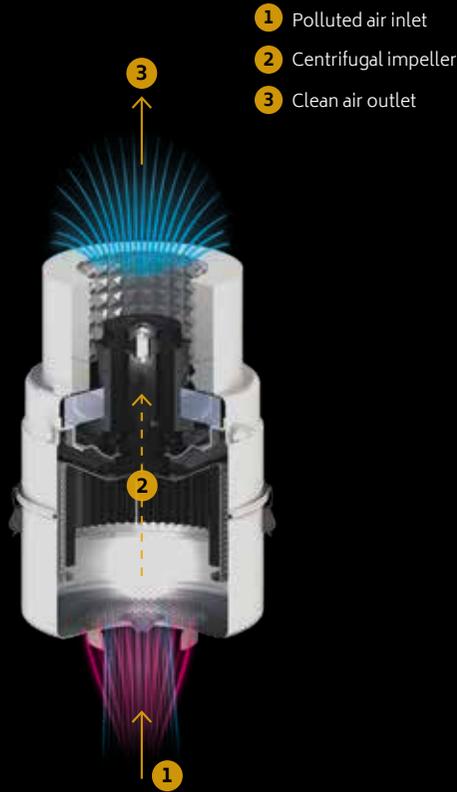
Drying of solid or assimilated material





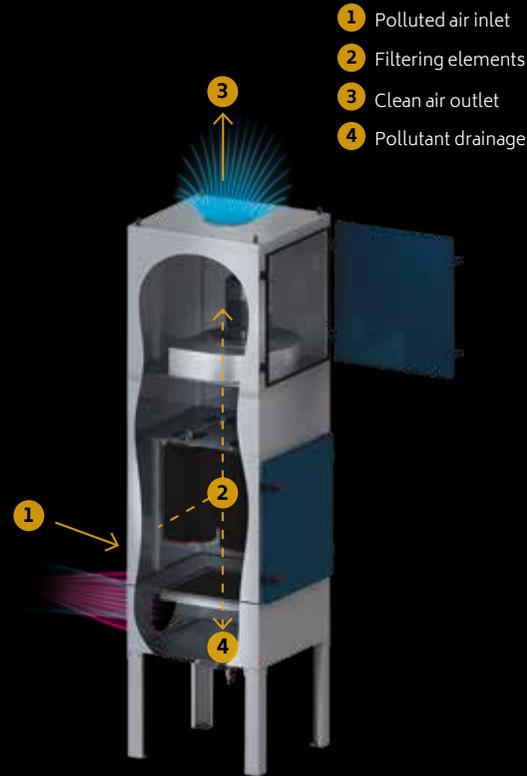
Oil mist : three ways to get it right.

Especially in mechanical processing there are work processes that produce oil mists and fumes. Three fundamental technologies are used to treat them:



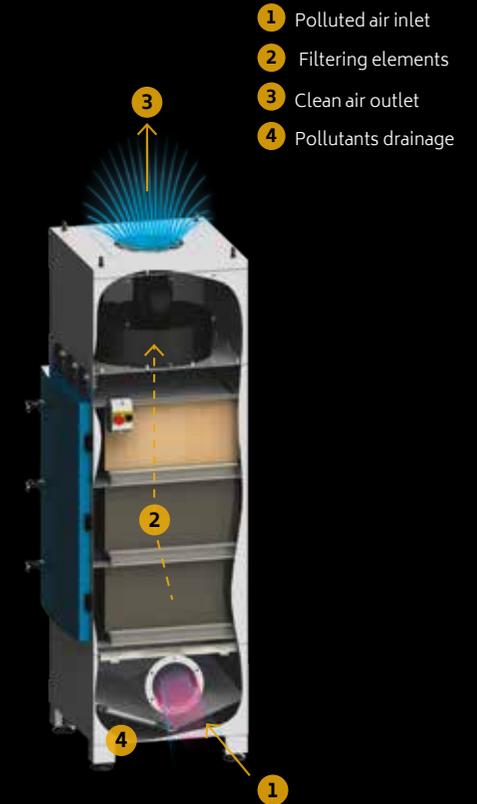
Centrifugal filter

The oil mists are filtered by the centrifugal force principle. The oil is separated and externally drained.



Static filter

The oil mists are filtered through special cartridges. The system is specific for treating emulsions and mixtures.



Coalescence filter

The filtering principle used is coalescence. The system is specific for treating heavy workings in the presence of oil fumes.

Centrifugal Filter CLEANMIST®

The air polluted by oil mists or coolant liquid is conveyed into the centrifugal filter through the inlet vent arranged with a mesh to prevent the filter from suctioning solid materials.



-  Mechanical Machining
-  Lathes
-  Industrial parts washer
-  Drilling
-  Milling
-  Reaming
-  CNC machine tools

Static filter MIST COMPACT®

It is a coalescing filter for the removal of emulsified oil mists. It is equipped with H13 efficiency pleated fiberglass cartridges and an external polypropylene membrane.

-  Mechanical Machining
-  Lathes
-  Grinding, superfinishing
-  Threading, Tapping
-  Cutting with sawing machining



-  Emulsion Nebulization
-  Drilling
-  Milling
-  Reaming
-  CNC machine tools

Coalescence filter MCOS

Mist Compact® Oil Smoke is a filtration system designed to separate oil and smoke particles from the air in harsh working conditions, exploiting the principle of coalescence. The applications of this type of filtration are above all mechanical processing.



**Mechanical
Machining**



**Applications with
presence of oil**



Lathes



**Grinding,
superfinishing**



**CNC machine
tools**



**Emulsion
nebulization**



Drilling



Milling



Reaming



Broaching



Volatile organic compounds filtration (V.O.C.): to each element its solution.

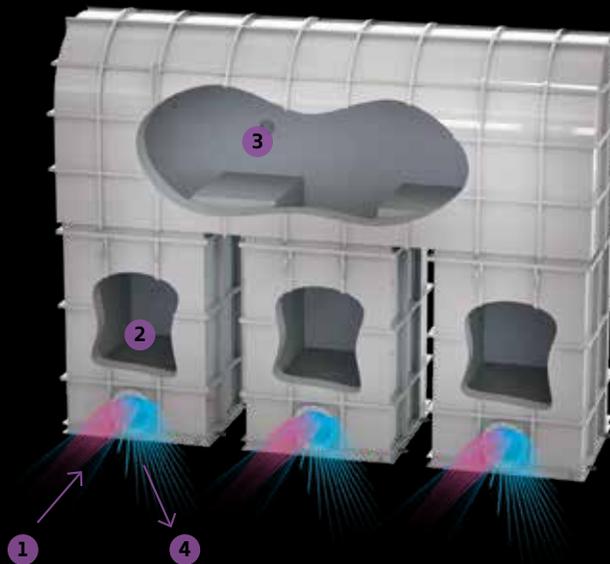
Industrial processes often produce chemical-based contaminants. Depending on the nature of the pollutants, three different technologies are used to purify the air:



Washing towers

The washing tower is the abatement system that allows the treatment of effluents containing water-soluble V.O.C. In this process the pollutants pass from the gaseous phase to the liquid phase.

- 1 Polluted air inlet
- 2 Ceramic elements
- 3 Combustion chamber
- 4 Clean air outlet



Thermal oxidizer

Abatement system that allows the complete destruction of V.O.C. through its conversion to carbon dioxide and water (oxidative process of combustion).

- 1 Polluted air inlet
- 2 Filtering elements
- 3 Clean air outlet



Activated carbons

Thanks to their porous structure similar to a sponge, they are able to block the chemical pollutants, especially those that generate bad odours.



Washing Tower – SCRUBBER

The operating principle is absorption, i.e. the solubilization of pollutants from the gas phase to the liquid phase. This process takes place by flushing the gas to be treated and with the liquid (usually water) in countercurrent. The addition of chemical reagents such as acids, bases or oxidizing agents, allows the elimination of pollutants by chemical reaction, in addition to solubilization.



-  Food processing
-  Die-casting processes
-  Chemical processing
-  Plastics processing
-  Farming activities
-  Pharmaceutical processing
-  Galvanic treatments

Regenerative thermal oxidizer

The operating principle of the thermal oxidizer is thermal combustion. The RTO (Regenerative Thermal Oxidizer) consists of a system of ceramic beds capable of optimizing the process energetically through appropriate heat exchanges, allowing the achievement of energy efficiencies between 95 and 99%.



-  Food processing
-  Die-casting processes
-  Chemical processing
-  Plastics processing
-  Farming activities
-  Pharmaceutical processing
-  Painting
-  Heat treatment

Activated carbon filters

The operating principle of activated carbon is absorption, i.e. the physical removal of pollutants by capture through the carbonaceous solid surface. The molecules of V.O.C. are absorbed on the surface, and with particular types of carbon they can also react superficially creating real chemical bonds.



Food processing



Die-casting processes



Chemical processing



Plastics processing



Farming activities



Pharmaceutical processing



Painting



Heat treatment



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κάθε στιγμή

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