



skooter.it

# EXTRACTION SOLUTIONS

# E



*Solutions for extraction,  
biomass and painting systems.*

*Italia\_ Fano PU \_ +39.0721.855.400  
info@coimagroup.it \_ www.coimagroup.it*



ED 03.2016



*Solutions for extraction, biomass and painting systems  
in more than 30 Countries around the world*



**EXTRACTION  
FILTERING  
PAINTING  
BIOMASS  
SOLUTIONS**

*Coima was born in 1982 in one of the most important Italian areas for industrial manufacturing and furnishing production.*

*It is mainly focused on the wood sector but over the years Coima's experience has also spread out in other fields such as mechanical, plastic and agroindustrial operations, as well as any industrial field with the need of using air as the vehicle for the removal of wasting material, both solid and gas.*

*From the very beginning the company has been specialized in design and installation of suction, filtering and storing systems for waste or gas arising from machinery operations, but not exclusively. The key characteristic of Coima's business proposal is its solutions, thanks to which the productivity, the efficiency of machineries and waste recycling are combined in a single proposal designed and created for the customer.*

*Coima's solutions expand to painting systems for any type of manufactured goods and to biomass treatment, such as thermal plants for water heating or steam production, and also briquettes and pellet industrial manufacturing system.*



**COIMAGROUP** 

*Solutions for extraction, biomass and painting systems  
in more than 30 Countries around the world*

## TVB

filter for briquetting machines



Sleeve filter, with frame or casing in galvanized steel, for indoor installations (where permitted) or outside. Ideal for the filtration of medium-fine particles. Electromechanical **shaking and cleaning system** with eccentric motor. Equipped with large inspection door to facilitate maintenance operations.

Direct discharge in the hopper of any standard briquetting press installed below the filtering battery, with **custom fitting** adapted to the type of press, **easy to disassemble** for the press maintenance operations.

Models from 5,000 to 12,000 m<sup>3</sup>/h of air capacity.

## FVA

open bags filter



Sleeve filter, with a galvanized steel frame, without casing, suitable for indoor (where possible) or roofed installations. Ideal for the filtration of medium-fine particles.

Electromechanical **shaking and cleaning system** with eccentric motor.

Discharge in plastic bags of standard size.

Support legs or, for smaller models, on a wheeled trolley.

Models from 3,000 to 22,000 m<sup>3</sup>/h of air capacity.

## CYC

cyclone



Centrifugal dedusting separator, made of galvanized steel, suitable for the filtration of medium-large particles. Dedusting of the powders takes place by effect of the centrifugal force caused by the spiral motion imposed on the treated fluid during the passage inside the separator.

The particles, having greater inertia than gas, will tend to hit the walls of the outer cylinder and to fall to the bottom of the cone, where a hopper receives the powder. The powders can then be recovered for further treatment.

Models from 1,000 to 50,000 m<sup>3</sup>/h of air capacity. Unloading to bins or rotary valve. Support legs, can also be customised.

Also **available in high efficiency version**, for the filtration of fine particles (models up to 25,000 m<sup>3</sup>/h of air capacity).

## FVC

bag filter with frame



Sleeve filters, with frame or casing in galvanized steel, for indoor installations (where permitted) or outside. Ideal for the filtration of medium-fine particles.

Electromechanical **shaking and cleaning system** with eccentric motor. Equipped with large inspection door to facilitate maintenance operations.

Discharge in plastic bags of standard size (1 to 5 bags in proportion to the required flow rate).

Models from 3,000 to 22,000 m<sup>3</sup>/h of air capacity.

## FI 4000 . 6000 . 10000

filter for indoor areas with pneumatic cleaning

### Reliable, silent and easy to use.

With its compact design to suit any environment, even inside production facilities, its highly effective operation in just a **small space**, the FI series is ideal for extracting various types of shavings and dust. Built in **painted metal panelling** and equipped with:

- settling chamber for the decanting of shreds into the filtering unit;
- needled felt filtering sleeves (500 g/m<sup>2</sup>);
- **automatic** programmable countercurrent compressed air **cleaning system**;

- continuous discharge of the shavings and dust into **handy wheeled metal bins with sight glass** to check the filling level.

Designed to operate in negative pressure, with high suction efficiency and maximum safety against fire and explosion, these units also feature a **built-in fire extinguishing water ring**. The high-efficiency centrifugal fan with backward curved-blades, fitted in a sound-proofed compartment inside the unit, makes it possible to achieve **higher negative pressure values than other filters on the market**, while only producing low noise.



### FI 4000

Model with 4,700 m<sup>3</sup>/h of air capacity. Standard discharge in 2 bins.

### FI 6000

Model with 6000 m<sup>3</sup>/h of air capacity. Standard discharge in 3 bins.

### FI 10000

For outdoor use in EU countries (\*also for indoor use only in non-EU countries), this version only handles dust, and not shavings or wood chips. Fitted with polyester cartridges.

### FI ATEX

With components to ensure compliance with safety legislation such as electric motor, fan, sleeve filters, explosion-proof panels, electrical panel.

### FI Brik

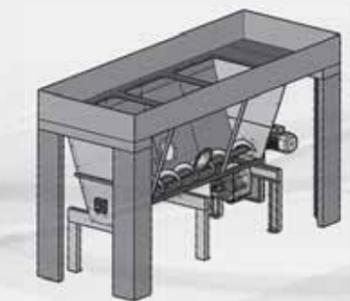
Designed for use with briquetting presses (400 mm higher) with special coupling system for hoppers, removable whenever necessary.

### Options:

- High efficiency filtering plenum for recirculating the air into the work environment
- Exhaust piping for discharging the air outside
- ATEX-compliant non-return valve on the intake
- Fire extinguisher
- High-power briquetting presses
- Connection for pneumatic conveyor with radial valve



Briquetting press systems



Hopper system and discharge screw for transfer

## UPD

filtering unit with continuous cleaning system by countercurrent compressed air blasts

Sleeve filter, with structure or casing in sturdy galvanized steel sheet, for outdoor installations. Ideal for the filtration of medium-fine particles and equipped with:

- **pre-chamber settling** to prevent the swarf from hitting the filter bags, thus increasing their life;
- **cleaning system with countercurrent compressed air jets** that, thanks to a programmable control unit, automatically manages the cleaning of the filter sleeves depending on the degree of clogging, with active suction;
- **lower hopper** for the collection and discharge with motorized screw conveyor and rotary valve, portholes and indicators of level of security;
- **step irons, platform n the roof with airtight large doors** fitted with gas springs for easy access to the upper level of the battery filter during maintenance operations;
- Atex **explosion-proof panels** and **fire ring** complete with water sprinklers.



Suitable for operation in both positive and negative pressure.

Models up to 300,000 m<sup>3</sup>/h of air capacity.



## UVD

filter unit with mechanical shaking cleaning

Sleeve filter, with structure or casing in sturdy galvanized steel sheet, for outdoor installations. Ideal for the filtration of medium-fine particles and equipped with:

- **mechanical shaking cleaning system** with eccentric motor;
- **lower hopper** for the collection and discharge with motorized hopper and rotary valve, portholes and safety level indicators;
- **step irons, platform and large door** with watertight closure for convenient access to the walking surface of the filtering battery during maintenance operations;
- Atex **explosion-proof panels** and **fire ring** complete with water sprinklers.

Suitable for operation in both positive pressure and negative pressure.

Models up to 70,000 m<sup>3</sup>/h of air capacity (larger units on request).



## MVD

filtering mini-silos with mechanical shaking cleaning of filters

Sleeve silo-filter, with structure and casing in sturdy galvanized steel sheet, for outdoor installations. Ideal for the filtration and storage of medium-fine particles and equipped with:

- **filtering battery** (in the upper part) with **electromechanical shaking cleaning** with eccentric motor;
- **step irons, platform and large door** with watertight closure for convenient access to the walking surface of the filtering battery during maintenance operations;
- **storage chamber** (from 3 to 20 m<sup>3</sup> of capacity) with motorized extractor composed of a bridge breaker cone, leaf springs in harmonic steel and sturdy external gear motor.

It allows **3 distinct discharge modes that could be used simultaneously** (bag, big-bag, briquetting machine, pneumatic or mechanical transfer, etc.). The standard version includes complete safety systems against fire and explosion such as: Atex explosion-proof panels, fire water ring complete with sprinkler and Atex certified electronic equipment.

Suitable for operation in both positive and negative pressure.

Models up to 27,000 m<sup>3</sup>/h of air capacity.



## MPD

*filtering mini-silos with continuous cleaning system by countercurrent compressed air blasts*



Sleeve silo-filter, with structure and casing in sturdy galvanized steel sheet, for outdoor installations. Ideal for the filtration and storage of medium-fine particles and equipped with:

- **filtering battery** (in the upper part) with **pneumatic cleaning system by means of countercurrent compressed air jets** which, thanks to a programmable control unit, automatically controls the cleaning of the filter bags depending on the degree of clogging, with active suction;
- **step irons, platform on the roof with airtight large doors** fitted with gas struts for easy access to the upper level of the filtering battery during maintenance operations;
- **storage chamber** (3 to 20 m<sup>3</sup> of capacity) with motorized extractor composed of a cone bridge breaker and leaf springs in harmonic steel, and sturdy external gear motor.

It allows **3 distinct discharge modes that could be used simultaneously** (bag, big-bag, briquetting machine, pneumatic or mechanical transfer, etc.). The standard version includes complete safety systems against fire and explosion such as: Atex explosion-proof panels, fire water ring complete with sprinkler and Atex certified electronic equipment.

**Suitable for operation in both positive and negative pressure.**

Models up to 40,000 m<sup>3</sup>/h of air capacity.

## STP

*filtering silo with pneumatic cleaning of filters*



Sleeve filtering silos, made of **calendered sturdy** and **hot-dip galvanized** steel sheet. Ideal for the filtration of medium-fine particles and equipped with:

- **filtering battery** (in the upper part) with **pneumatic cleaning system by means of countercurrent compressed air jets** which, thanks to a programmable control unit, automatically controls the cleaning of the filtering sleeves depending on the degree of clogging, with active suction;
  - **step irons, platform and large door** with airtight closing to ensure easy access to the filtering battery floor during maintenance operations;
  - **storage chamber** (20 to 500 m<sup>3</sup> capacity) with cardan motorized extractor (up to 140 m<sup>3</sup>) or **forced movement through pneumatic system** (extremely sturdy, up to 500 mc);
  - the latter, thanks to an intermediate buffer, allows **3 distinct discharge modes that can also be used simultaneously** (briquetting machine, pneumatic or mechanical transfer, etc.).
- The standard version includes complete safety systems against fire and explosion such as: Atex explosion-proof panels and fire water ring complete with sprinkler.

**Suitable for operation in both positive and negative pressure.**

Models up to 200,000 m<sup>3</sup>/h of air capacity.

## STV

*filtering silo with electromechanical cleaning of filters*



Sleeve filtering silos, made of **calendered sturdy** and **hot-dip galvanized** steel sheet. Ideal for the filtration of medium-fine particles and equipped with:

- **filtering battery** (in the upper part) with **electromechanical shaking cleaning** with eccentric motor;
- **step irons, platform and large door** with watertight closure for convenient access to the walking surface of the filtering battery during maintenance operations;
- **storage chamber** (20 to 500 m<sup>3</sup> capacity) with cardan motorized extractor (up to 140 m<sup>3</sup>) or **forced movement through pneumatic system** (extremely strong, up to 500 mc);
- the latter, thanks to an intermediate buffer, allows **3 distinct discharge modes that can also be used simultaneously** (briquetting machine, pneumatic or mechanical transfer, etc.).

The standard version includes complete safety systems against fire and explosion such as: Atex explosion-proof panels and fire water ring complete with sprinkler.

**Suitable for operation in both positive and negative pressure.**

Models up to 120,000 m<sup>3</sup>/h of air capacity.

## SIS

*storage silos*



Circular storage silos for wood chips, made of **fully galvanized** and **sturdy calendered steel sheet**. **Storage chamber** (20 to 500 m<sup>3</sup> capacity) with cardan motorized extractor (up to 140 m<sup>3</sup>) or **forced movement through pneumatic system** (extremely sturdy, up to 500 mc); the latter, thanks to an intermediate buffer, allows **3 distinct discharge modes that can also be used simultaneously** (briquetting machine, pneumatic or mechanical transfer, etc.).

The standard version includes complete safety systems against fire and explosion such as: Atex explosion-proof panels, fire water ring complete with sprinkler and Atex certified electronic equipment.

## HP

high depression filtering unit



Technological group suitable for the suction from **portable tools** such as roto-orbital calibrators, planers, drills, etc. both electric and pneumatic, provided they are fitted to connect to the suction unit. Suction and filtering units are equipped with filtering cartridges with pneumatic cleaning system through countercurrent compressed air jets. The **high pressure** blower is integrated within the unit and is therefore soundproofed. This group ensures adequate suction through very long small-diameter hoses (diameter <50 mm). Possibility to discharge into a bag or **direct discharge to central vacuum system** (optional). Models from 80 to 1,600 m<sup>3</sup>/h of treated air flow (1 to 20 hand tools), with the possibility of **automatic modulation of the suction flow through an integrated inverter**.

## JOL

suction arm for high vacuum systems



**Sturdy and easy-to-handle** articulated arm which allows you to work comfortably with hand tools in a range of up to 7 m.

It is supplied with supports for fixing to a wall or with a column to fix it to the ground. Integrated suction channel, compressed air tubes and electrical cables for the power supply of each type of portable tool.

Available in length from 5 to 7 m.

## HPC

power supply and suction units for portable tool



Power unit for feeding and suction of portable tools, equipped with electrical power outlets, quick couplings for compressed air (depending on the type of roto-orbital tool used), exclusion valves, pressure regulators, and finally quick couplings for low-pressure compressed air for the gun blower.

Available in versions for wall mounting (or bench), to be fixed to the ground by means of a bearing column, or to be connected to articulated arms or to high-depression central extraction systems.

## SAF

filter for welding fumes



Filter in metal straw (low efficiency) or with pockets (high efficiency), made of galvanized steel, suitable for the filtration of welding fumes.

Models up to 30,000 m<sup>3</sup>/h of air capacity.

## BM

suction arm for welding fumes and grinding dust



**Sturdy and easy-to-handle** articulated arm, suitable for localized suction such as welding fumes or grinding dust. They can be supplied with supports to fix them to a wall or with a column to fix them to the ground, and on request a suitable suction unit can be added.

Available with length from 1 to 5 m and diameter 150 or 200 mm.

## PA

suction wall for welding fumes and grinding dust



Wall made of slotted galvanized sheet metal, with customised shape and size, ideal to immediately remove the fumes produced by welding operations on large surfaces from the operator; it is equally suitable to suck up dust clouds produced by grinding/sanding operations.

## FPC

dust filter with pneumatic backwash cleaning with compressed air

Cartridge filter, made of sturdy galvanized metal sheet for outdoor installations. Ideal for the filtration of very fine particles too, and not only for the wood industry but also **for the agri-food-metal-plastic sectors.**

Equipped with:

- **filtering battery** (in the upper part) with **pneumatic cleaning system by means of countercurrent compressed air jets** which, thanks to a programmable control unit, automatically controls the cleaning of the filter cartridges depending on the degree of clogging, with active suction;
- **lower hopper** for the collection and discharge with motorized conveyor screw and rotary valve (or direct discharge in bins on wheels), portholes and indicators of safety level;
- **step irons, platform on the roof with airtight large doors** fitted with gas struts for easy access to the upper level of the filtering battery during maintenance operations;
- Atex **explosion-proof panels** and **fire ring** complete with water sprinklers.

**Suitable for operation in both positive and negative pressure.**

Models up to 250,000 m<sup>3</sup>/h of air capacity.



## UTA\_UTA-R

air handling units for pressurization, heating, cooling and recycling

Fan coil, coated in polyurethane foam double sandwich panels, used for the pressurization, heating and cooling of the workplace. It contains a water-air heat exchanger (2 or 4 sets), a low-noise centrifugal fan and a class G4 or higher filter.

Also suitable for the temperature control and pressurization of workplaces such as painting booths. Also available in vertical configuration.

Upon request, a battery-powered cold-water cooling system can be provided.

### UTA-R version

It includes a cross-flow exchanger through which it is possible to recover some of the heat that would otherwise be lost to the atmosphere, by preheating the incoming air.



## CAP

booth for sanding dust, grinding dust and fumes

Booth made of galvanized steel, available in different dimensions (customised solutions on request), for the suction of dust clouds resulting from sanding, grinding or welding operations; it allows the immediate removal of the cloud from the operator.

Available in versions for connection to central vacuum system or as stand-alone unit, equipped with filter cartridges with **pneumatic cleaning system through counter-current compressed air jets** and integrated suction that ensures proper suction speed on the entire suction surface.



**BA***suction bench for centralized extraction systems*

Galvanized sheet workbench with suction from the bottom, from the sides and from the front, to carry out sanding operations in total safety thanks to the suction slots on the work top, covered with scratch-resistant felt (optional). Available in different sizes (customized solutions are possible), it requires a connection to a central suction system.

**BAP***stand-alone suction bench for dust suction*

Galvanized sheet workbench with suction from the bottom and from the sides, to carry out sanding operations in total safety thanks to the suction slots on the work top, covered with scratch-resistant felt (optional).

Equipped with filter cartridges with **pneumatic cleaning system by means of countercurrent compressed air jets** and integrated suction that ensures proper suction speed on the whole surface.

**BAC***stand-alone suction bench for the construction industry (marble, ceramics, gypsum)*

Galvanized sheet workbench with suction from the bottom and from the sides, to carry out sanding operations in total safety thanks to the suction slots on the work top, covered with scratch-resistant felt (optional).

Equipped with filter cartridges with **pneumatic cleaning system by means of countercurrent compressed air jets** and integrated suction that ensures proper suction speed on the whole surface. It is also prepared for the **connection to the water system** for the removal of the filtered dust.

**FOL***filter for oil mist*

Dual-stage filter, fitted with metal straw and filter bags, suited for machine tools (lathes, threading machines, gear cutting machines, grinding machines, cold pressing, numerical controls, etc.) and for the food industry: (vegetable oil nebulizers, machines for dough processing, etc.). Made of galvanized steel, for outdoors or indoors installation.

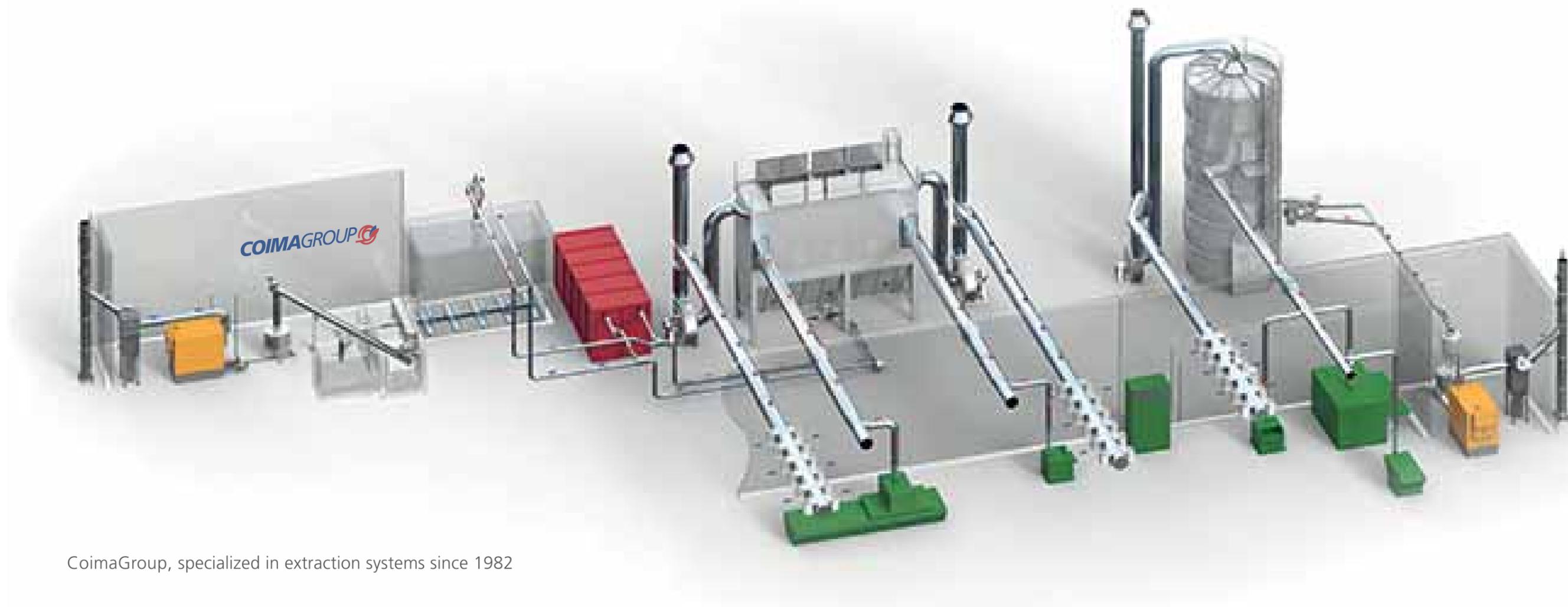
Models up to 24,000 m<sup>3</sup>/h of air capacity.

**FCA***activated carbon filter*

Filter to be used for the **reduction of odors, solvents and other gaseous pollutants** in low concentration.

It is custom-made in galvanized sheet, with easy-to-extract drawers to contain active carbon, for easy maintenance.

## *EXTRACTION SOLUTIONS MADE IN ITALY*



CoimaGroup, specialized in extraction systems since 1982

All the aforesaid products can be combined together to create customized systems, suitable for the suction and filtration of various solid and gaseous pollutants, of varied grain size and chemical composition. All plants designed, manufactured and installed by Coima can solve the problem of contamination and safety of specific workplaces, allowing comfort and safety conditions that are compatible with the optimization of process operations in compliance with the regulations in force.

