



KEY BENEFITS

- RAF-4M with rotary valve or screw conveyor handles air volumes up to 48000m³/h
- Wide range of rotary valves/ screw conveyors for discharge
- ATEX certified for St 1 and St 2 dust with a Kst value up to 300 bar m/s.
- Compact design
- Suited for handling large volumes of air with heavy material contamination
- Designed for continuous operation or operation with a 15 minutes cleaning pause approx every four hours
- To be mounted either on the ground or on the roof
- Overpressure version or vacuum version up to 5,000Pa
- Explosion venting up-ward or side ward
- Powerful on-line cleaning by efficient regeneration fans
- Patented polyester SUPERBAG filter bags
- Easy to Install on site and extend when required
- Reduced power consumption

REVERSE AIRFLOW FILTER

RAF-4M DUST EXTRACTION SYSTEM

RAF-4M BAG FILTER WITH ROTARY VALVE OR SCREW CONVEYOR

The RAF-4M Filter is designed for small and medium-sized air volumes and can handle large volumes of heavy material concentration.

It is a modular filter made of galvanised steel sheet. The filter is self-supporting; it has telescopic supporting legs and is suitable for outdoor locations. Each module of the filter construction is fitted with a combined inspection and explosion relief door. A regeneration fan is mounted for reverse air cleaning of the filter bags. The filter is fitted with the unique patented SUPERBAG filter bag.

The medium/large particles are separated in the filter hopper and Inlet section (optional) and the air is then distributed to the filter bags. The collected material is discharged through the rotary valve or screw conveyor.

The filter is for use in situations requiring non-pressurised material discharge directly into a silo, container or separate material transport system. The filter can be supplied for either continuous operation or with a pause for cleaning of the filter bags every four hours.



Technical parameters:

- Maximum working temperature: 75°C
- Maximum vacuum: 500Pa, optional 5000Pa
- Maximum over pressure: 800Pa
- Inlet through the filter hopper or through Inlet module
- Regeneration fan for reverse air cleaning of filter bags, can be fitted in the side or on the roof
- Combined inspection and explosion relief doors
- Filter area per module:
HJ: 85m²
340m² filter area for RAF-4M

Options:

- Range of filter media suited to the dusts to be treated
- Regeneration fan on the side or on the top
- Explosion relief venting through combined inspection and explosion relief doors on the side, in the top, or UP venting.

Accessories:

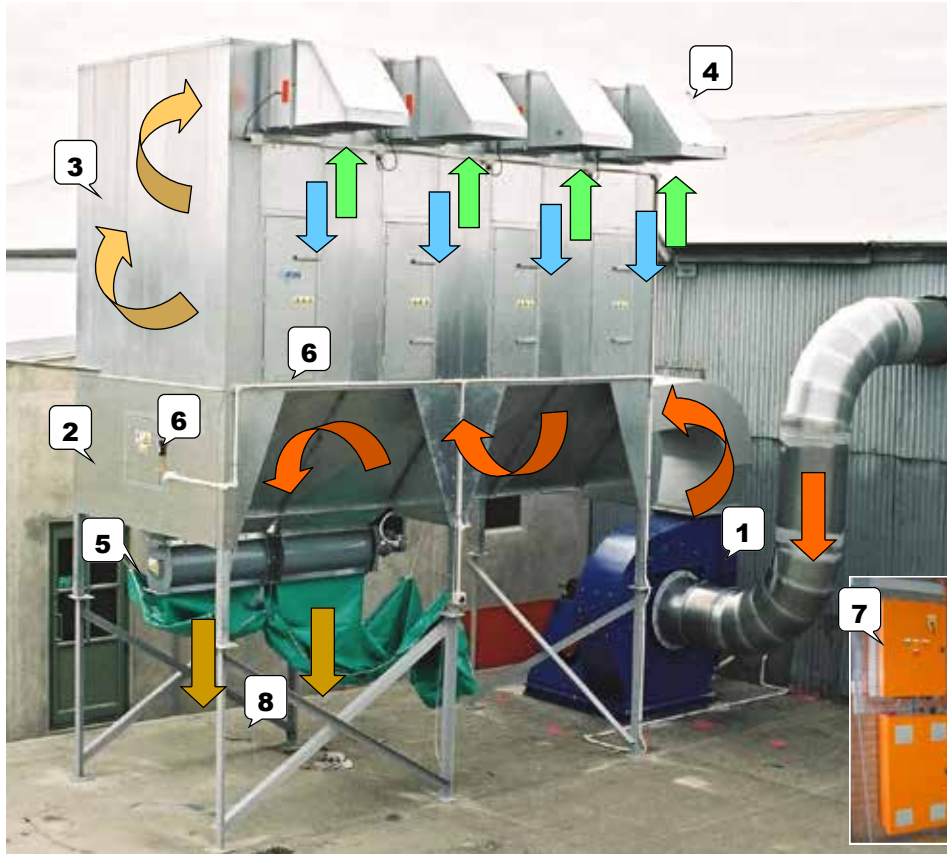
- Regeneration fan
- Return air ducting components for positive and negative pressure version
- Bracing
- Gangway and ladder for maintenance purposes
- Dry sprinkler system



RAF-4M REVERSE AIRFLOW DUST COLLECTOR

SYSTEM DESCRIPTION;

1. Main extraction fan (or fans)
2. Hopper area
3. Filter area:
200 antistatic Polyester filter bags,
2400mm x 200mmØ = 340m² approx.
4. Four (4) 1.1kW Regeneration fan
5. 0.75kW Rotary valve
6. Safety switches and inspection doors
7. Control panel (inset)
8. Exit to waste bin or blow-line



HOW IT WORKS:

- Extracted waste enters the bottom of the collector from the fan (1) and through a back-pressure flap in the end of the hopper (2) .
- The dust velocity slows dramatically, dropping most of the heavier waste to the hopper floor and out through the rotary valve air-lock (5) .
- The light, or fine, dust tries to exit the collector by travelling up the filter socks (3) towards the Regeneration fan outlets (4) .
- At set time periods, and one section at a time, each self-cleaning regeneration fan “blasts” fresh air back through the bags knocking any dust caught down to the hopper floor and out through the rotary valve.
- All functions are controlled by a PLC.

CAPACITY:	AIR VOLUME:	FILTER AREA
RAF-2M	24,000m ³ /hr	@ 170 m ²
RAF-3M	36,000m ³ /hr	@ 255 m ²
RAF-4M	48,000m ³ /hr	@ 340 m ²

DIMENSIONS:

2400W x 4800L x 5800H (+ fan)

BENEFITS:

Modular design allows for easy expansion in the future.

QUALITY EUROPEAN DESIGN & MANUFACTURE
MINIMAL MAINTENANCE - PROVEN RELIABILITY & PERFORMANCE
EXPANDABLE MODULAR CONSTRUCTION
OVER 35,000 SYSTEMS INSTALLED WORLD-WIDE.

