

# Filters, cyclones & extractors

Naaykens Luchttechnische Apparatenbouw has over 70 years of experience in building standard and customized industrial solutions.



### **TIMELINE**

1945		Founded by Th.A. Naaijkens
 1955		Start construction new production facility at Lovense Kanaaldijk
 1958		Licensee of Chicago Blower Corp.
 1973		Second generation
 1982	······	Establishment subsidiaries Straaltechniek International
 1987		Re-development business premises
 2015		Third generation makes its appearance



maintaining and replacing

industrial fans, filters and extractors. Whether a complete

environmental problems is

solution with regard to air or

required, or just replacement of individual components or piping:

Naaykens' team of engineers and mechanics will do the job!

The production is carried out with care by experienced professionals in our well-equipped workshop in Tilburg, The Netherlands.

Naaykens has a flat organizational structure. Lines of communication between various departments are short, enabling a quick response to your requests.



#### **FILTERING**

Gas or air flows used for production processes should be stripped of substances that can be harmful to the environment or health.

For the dedusting of gases and filtering of air Naaykens offers a wide range of filters and seperators (cyclones). A distinction is made between:

- Air filters cleaned by compressed air
- Mechanically cleaned filters
- Stationary uncleaned filters
- Mechanical separators

Naaykens also supplies portable filters, complete with fan, used (for example) for blasting and painting ships, bridges and pylons.





### AIR FILTERS CLEANED BY COMPRESSED AIR

For a continuous production process it is important that filters operate sustained. Our production program includes three types of filters to meet this requirement:

- Pat-Jet filter with filter cartridges
- Cobra-Jet filter with filter hoses.
- E-Jet with filter cassettes.

These filters are cleaned in stages by compressed air pulses. The compressed air flows in counterflow through the filter elements, controlled by a solenoid valve. The solenoid valve is electronically actuated with settings for time interval, pulse time and (optional) pressure.

### MECHANICALLY CLEANED

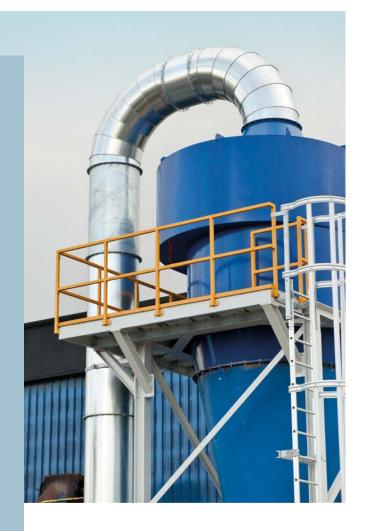
Mechanically cleaned filters are suitable for trapping fine particles. When the fan is switched off and has run out, cleaning is automatically started. By means of a vibrating or shaking device, the filter hoses are cleaned.

Naaykens' delivers among others:

- Cobra SMT round filter (vibrator)
- Cobra SMKT cloth filter (vibrator)
- Cobra SMK cloth filter (knock mechanism)

Because of this periodic cleaning, mechanically cleaned filters are only suitable for short production processes of maximum 4 hours.

The major advantages of this type of filter are low cost of operation compared to a compressed air cleaned filter and no need for a compressor.



Uncleaned filters are suitable for the removal of very fine dust. After a certain time it is mandatory to replace the filter medium.

# STATIONARY UNCLEANED FILTERS

Filtering material can be delivered on a roll, for example for use in spray booths. Filters for airconditioning installations, or as part of a dust extraction installation are supplied as a bag filter. The latter possess a large filter surface, which ensures a long service life and low initial resistance. Bag filters are also suitable as pre- or final filter.



# MECHANICAL SEPARATORS

Mechanical separators are used when a grove separation must be made between gas and dust particles. The separation is based on the inertia of the particles to be separated. Examples are labyrinth separators and cyclones.

Mechanical separators consist of a simple construction with no moving parts, resulting in minimum maintenance.

Other important advantages of mechanical separators are:

• suitable for extracting large quantities of dust

• low risk of blockage



#### **MARKETS**

Our filters are used in many industrial markets which include, among others:

- Metal (processing (welding, cutting, grinding, machining, etc.), surface treatment (grinding, blasting, peening, flame spraying, curing) and foundries)
- Building materials and glass (manufacturing and recycling of bricks, tiles, tiling, cement, lime, plaster, concrete, glass, wood, plastics, etc.)
- Chemical (manufacturing of basic chemicals, pharmaceuticals, flavors and fragrances, rubber, petrochemical, plastics, fibers and paint)
- Nutrition Stimulants and Pharmacy (processing of fresh products, baked goods, pet food, beverages, slaughterhouses, snacks, tobacco and dairy)
- Environment (recycling of a wide variety of waste streams, waste processing and the generation of electricity).
- Mining
- Wood and Paper
- Machines and Apparatus
- Textile
- Transportation
- Publishing and Printing
- Interior design and furniture







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