

Aquafil Engineering has long experiences and several long term clients that are using continuously the mist eliminator systems for different applications.

Aquafil Engineering builds plants for the following industries :

- Plastics
- Rubber
- Chlorine
- Phosphoric Acid
- Nitric Acid
- Sulphuric Acid
- Textiles
- Synthetic Fibers
- Cellulose & Paper
- Fertilizer
- Metal
- Others

There are many different production processes that generate fine organic aerosols and mists, e.g.

- Extrusion, injection moulding, blowing, etc.
- Coating of textiles, metals, papers, etc.
- Thermofixation of textiles

In the nylon production plants of the Bonazzi Group the monomers and oligomers are sucked off at the spinning and casting die heads, and led to the Aquafil Engineering mist eliminator. Several waste gas streams can be combined to one stream with a central mist eliminator. The cleaned air leaves the plant and the separated products return to the plant.

Unit with one filter cartridge
Ø 600 mm x 1000 mm long



Process Description

In all these cases, hydrocarbons are evaporated that condense in the atmosphere and generate fine mists with a high light scattering effect and therefore high opacity. Pollution control regulations in Germany forbid emission concentrations of more than 20mg/m for these products.

With a mist eliminator plant designed by Aquafil Engineering you easily can reach the required concentrations. Because of our experiences we can guarantee in most cases which separation efficiency can be realized in our separators under given conditions. However, sometimes it is advisable to carry out a test on site. Therefore we have a number of pilot plants available that carry out realistic tests in partial flow with a capacity up to 2500 m³/h.

The basic components of this process are the Aquafil Engineering mist eliminators. These are filter cartridges, which are made of a dense - packed layer of special glassfiber. The filter candles are available in standard dimensions of 600 mm diameter and 1500 resp. 3000 mm length. Nevertheless also other lengths, diameters and special constructions can be delivered. For organic mist the 3000 mm cartridge has an average capacity of 2500 m³/h at a pressuredrop of 300 daPa. In case of higher volumes more than one cartridge is used.