

OILSCREEN | Oil mist filtration

Oil mist collector for industry

What is OILSCREEN, oil mist collector?

The coalescing filter is effective in the removal of oil mists: very fine particles dispersed in air and / or gas streams and deriving from the use of emulsifier oils, lubricating oils, cooling oils, inks and tars. The above mentioned pollutants result from different production processes, such as plastics and textile processes, and from mechanical processing by means of machine tools.

Gallery

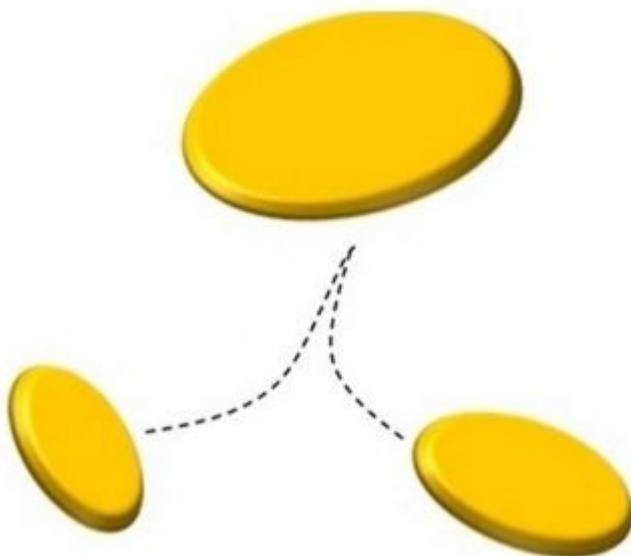
Oil mists filtration: How does it work?

The removal of oil mist is performed through the coalescence: the physical phenomenon through which the drops of a liquid or a gaseous substance, are combined together to form larger drops. OILSCREEN uses this principle to facilitate the elimination of oily particles from the gaseous stream.

The OILSCREEN uses a special surface that promotes contact of oily droplets in order to create the phenomenon of coalescence (and, consequently, the aggregation of the particles).

Once grouped together, these drops tend to fall down by gravity, towards the lower part of the filter where the oils are then collected for disposal.

AGGREGATION OF OILY DROPLETS



The treated effluent, purified by these oily substances, is then aspirated by the fan and sent toward the eject chimney.

OILSCREEN makes the most of its potential if the treated oils have a high viscosity and if the flow

is free from dust. In fact, depending on possible other pollutants present in the stream to be treated, the system may require a pre-treatment.

Strengths of the OILSCREEN coalescing filter

The OILSCREEN coalescing filter:

- is able to achieve a filtration efficiency higher than 99,99%;
- allows the recovery of the pollutant, thanks to the tank placed at the base of the filter;
- maintains its properties unchanged and doesn't undergo degradation or deteriorations even after thermal shock (within certain limits);
- doesn't require any special maintenance or replacement;
- allows treating airflows with temperatures up to 80°C;
- is a compact equipment;
- it has a heating system for thermostabilization;
- it can be made complete of external insulation, at various degrees of insulation, in order to avoid the undesirable effect of water vapor condensation possibly present in the emissions to be treated.

Available options

- jib crane for lifting and extracting the filtering modules;
- construction with INOX steel.

OILSCREEN coalescing filter: maintenance service

Tecnosida® is a perfect partner for planning and execution of ordinary and extraordinary maintenance services required to :

- Verify filter's proper functioning
- Keep high filtration efficiency
- Reduce economic and energetic wastes
- Comply with safety and environmental rules and regulations

Contact us for more information