

Filtration Group application example – Factory Equipment

Oil mist separation – LGA 600 FU



Factory Equipment

Initial situation

A **well-known manufacturer of Diesel-systems** produces in Homburg/Saar among others fuel injection pumps for passenger cars.

The components are produced on different machine centers. In the **molding machines** oil is mainly used as cooling lubricant for the tools. Due to the **high rotary speeds the oil evaporates** in working room of the machine centers. The oil mist needs to be evacuated from the machine and the employees need to be protected against **breathing in the harmful oil aerosols**.



Solution statement

The **Filtration Group LGA oil-mist separators** have been installed, piped, configured and launched on multiple machine centers by the Filtration Group service engineers.

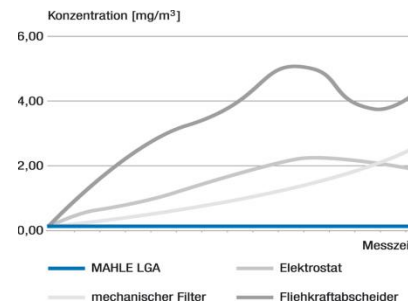
Result

- A **significant increase** of the separation rate was achieved and documented
- **Secured separation and recovery** even of finest oil droplets by the nearly maintenance free coalescer principle
- **Protection of employees** and equipment thanks to the compliance to prescribed TA-Luft values
- A report in the **internal BOSCH company newspaper** shows the new solution with all involved employees



Customer value

- Extension of the service interval **from 3 to 12 month**
- **Reduction of machine downtime** to a necessary minimum
- Reliable **protection of the employees' health**
- Complete **recovery of the separated oil**
- Nearly **no wasted material** in the LGA-system
- The issue of **intensive cleaning efforts** for the removal of oil films in the production hall and in the machine centers has been **eliminated completely**



Challenge

At the machine centers of the manufacturer there are generally **electrostatic-separation systems** installed. The air together with the oil mist is evacuated from the machine working room, but the separation **result was not satisfactory**.

Issue

- **Oil drops deposit** in the factory hall and on the machines
- The machine operators and other employees have to **breath in harmful oil aerosols**
- Very short maintenance intervals for the electrostatic separation system (4x per year)

Target

- **Increased separation rate** and significantly **reduced remaining oil content** in the air
- Compliance with the **prescribed values of the 'TA-Luft'**
- **Reliable complete solution** with low maintenance requirements
- **Assured protection of employees and equipment**

