

## Driving the Future of Clean Innovation with MAN, Germany

MAN Truck & Bus SE is a global leader in commercial vehicle and engine manufacturing. At the heart of its operations in Nuremberg, Germany, lies a dynamic hub for innovation. Alongside the production of its renowned 6-cylinder in-line engines, the site now hosts a state-of-the-art battery plant. With a newly built, 15,000 m<sup>2</sup> production line, MAN is taking a bold step forward—embracing high levels of automation to deliver unmatched efficiency, premium quality, and a clear commitment to sustainable manufacturing.

### Objective

The production line in Nuremberg sets exceptionally high standards for air filtration. Advanced machining processes such as minimum quantity lubrication (MQL), dry machining, and wet machining generate fine aerosols and oil mist, with particle sizes below 1 µm. To maintain optimal air quality on the shop floor—while upholding energy efficiency and sustainability—an advanced extraction and filtration solution was essential.

#### Solution

Absolent delivered a custom-engineered filtration system designed to meet the exact needs of the Nuremberg facility. The solution comprises 14 high performance Absolent oil mist, oil smoke, dust and fume extraction units - together providing a total airflow capacity of 104,000 m³/h. The modular architecture enables specific requirements to be met, with each filter unit tailored to the specific needs of individual machining processes. The smallest group of filter units provides 4,000 m³/h, while the largest provides up to 12,000 m³/h.

Smart 3D planning enabled the installation of a 700-meter pipe network engineered to minimize energy loss. Premium materials and a spiral-free ductwork design ensured both high efficiency and operational reliability. With long filter life and reduced maintenance requirements, the system supports sustainable, cost-effective production—day after day.

#### Results

The filter systems installed provide excellent performance and ensure a clean working environment for employees. Energy consumption has been kept 50% below original expectations, significantly reducing operating costs and supporting MAN's sustainability goals.

The partnership between MAN and Absolent serves as a model for combining modern production technology with efficient environmental solutions. Together we are setting new standards for the industry.

Do you want to reduce downtime, energy consumption and maintenance costs?

Contact Absolent today!











# The complete solution by Absolent

With over 30 years of experience, Absolent offers a comprehensive, modular filtration solution for the efficient removal of oil mist, smoke and dust in demanding industrial environments. Each system is built on a scalable architecture that allows optimal configuration based on process type, emission load and airflow requirements. Multi-stage filters ensure long service life, low energy consumption and consistent high performance filtration.

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