

CASE STUDY

Meat Processing Industry



TÖNNIES

BOOSTING AIR QUALITY STANDARDS IN THE RIGHT PLACE IMPROVED PRODUCTION CONDITIONS AND EMPLOYEES WELLBEING

THE CUSTOMER

The Tönnies Group is a global meat processing company, that stands for quality meats. The international company operates in eight divisions, has approximately 16,500 employees, and in 2018 generated annual revenue of EUR 6.65 billion.

THE CHALLENGE

In the meat processing industry, there is a big focus on ventilation technology for the prevention of the virus outbreak. Due to a lack of standards in the industry around ventilation, there is very little guidance around what should be considered as the clean air requirements for the facility.

Scientific studies have shown that recirculation of air, around a facility, can cause the spread of harmful viruses. These studies have shown that in areas of poor ventilation the virus can remain in the air for up to 3 hours. In this facility, the production area need a sufficient amount of supply air. Also, the temperature in the production areas needs to be maintained between 6-10 degree Celsius, which was controlled by the air circulation system. The room utilised recirculated air, this meant that the air in some areas was reused in other areas. This type of system is often

used to help reduce energy consumption but it can have negative effects, without adequate filtration, in this case, viruses, can be spread throughout a building.

During the virus pandemic this system needed to be addressed and a balanced hygiene approach was required. Camfil's challenge was to create a solution that will help ensure that the clean air introduced to the facility will protect the health of the employees as well as optimize the low energy consumption initiatives that were in place.

THE SOLUTION

CC6000 air cleaners, equipped with H14 HEPA filters (Clean room standards) , free standing

CC2000 air cleaners, equipped with H14 HEPA filters (Clean room standards), free standing and wall mounted

In addition to the general precautions that need to be taken during a pandemic -such as protective face masks, social distancing and workplace separation - the company wanted to focus on improving the indoor air quality and how it can help protect their workforce. Meat processing companies require clean air to reduce the particulate levels within



FACTS: Air Cleaner CC 6000:

- Healthier employees
- Improved employee wellbeing
- Reduced cleaning costs
- Reduced environmental impact
- Uniform temperature distribution across all production areas

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the facility to both improve production room conditions and to protect against the spread of airborne viruses. The reason for this is the viruses use airborne particulates to travel and particulates removal in the air will reduce this risk. To ensure that the air was cleaned to the required standards, high performance air filters/cleaners were suggested to be installed. High efficiency filters would help capture the airborne viruses such as COVID-19 and ensure that the HVAC system utilised would have reduced risks.

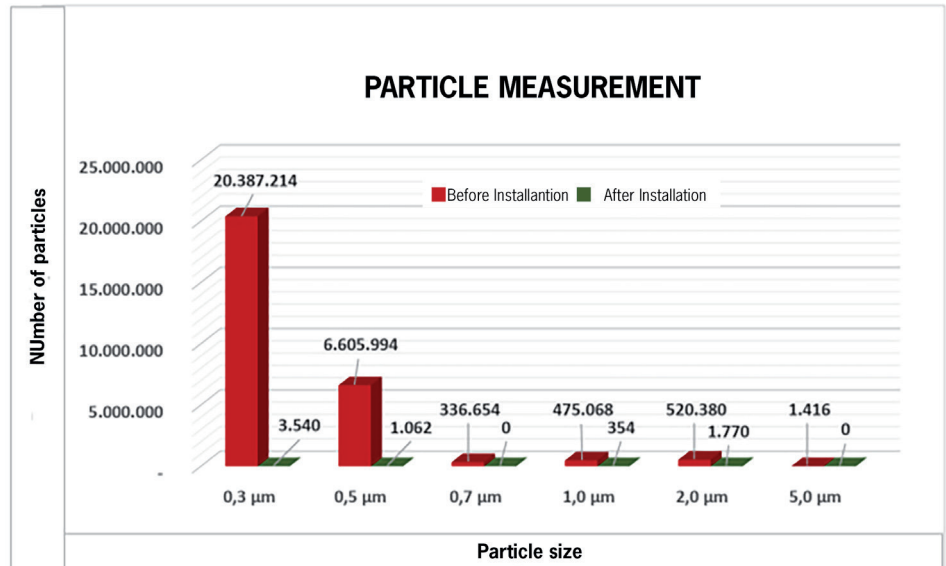
As a solution Camfil were able to offer our CC6000 and CC 2000 range of air cleaners that were equipped with H14 HEPA filters. After the technical design and installations of these patented air cleaners, a team of experts, including occupational hygienists and physicians from a recognised university - carried out testing on-site for several days using cold smoke and particle measurements. The systems were wall and ceiling mounted to allow a good airflow and even distribution of air across the production floor.

TEST RESULTS: Shortly after the air cleaners were turned on the particle levels were reduced by more than half

THE RESULTS

The use of Camfil Air Cleaners has removed the airborne microbes and particles sufficiently from the indoor air to ensure a safe production environment for both the personnel and the processes involved. The tests proved the reliable and optimal performance of the air cleaners as part of the pandemic prevention scheme. This system allowed the production facility to become operational again without the hazard of transmission.

THE MEASUREMENTS



PROSAFE CERTIFICATE

Air filter products with the ProSafe logo ensure guaranteed performance using high quality materials for maximum process reliability. Prosafe is also fully traceable for the control of materials and processes.

PROSAFE - BENEFITS AT A GLANCE

- Conforms with the BRC Global Food Safety standard 8.0
- Biological resistance and antimicrobial growth - ISO 846 tested
- Food Safety- EG 1935/2004
- Hygienic ventilation and IAQ guaranteed - Conforms to VDI 6022

