

st Seed Plan



# FAN RANGE

DRYING



An expert  
at your side.



# An Expert at your Side.

Cimbria is a leading expert in seed- and food processing, grain handling and storage. Part of this is our depth of knowledge and expertise in aspiration systems. This allows us to optimize air volumes and thus help reduce energy costs for our customers. Both our environment and your staff deserve highly efficient dust collection systems, so we thrive for a clean atmosphere and workspace when designing your plant. Cimbria is the ideal partner for engineering and executing your aspiration system.



## Superior Fans.

Fans are a crucial component in aspiration systems and play a vital role in effectively keeping the processing lines free of dust, thus ultimately preserving the quality of harvested grains to maximize their value. Cimbria's fans are the result of many years of testing by the company's research and development center. We offer that experience and knowledge to provide you with **proven dust separation systems**. They are compliant with ever-stricter legislative demands, and additionally, they can be equipped with **advanced noise reduction systems**, making them the correct solution when noise levels are a consideration.

Cimbria fans are available in various sizes and configurations to accommodate different drying capacities and grain types.



## Cyclofan.



**Cimbria's patented Cyclofan series provides unsurpassed dust separation combined with low energy consumption. Cyclofan achieves a typical dust-separation efficiency of 96-98%.**

The Cimbria Cyclofan combines a fan and an efficient dust separator. Dust is separated using centrifugal force in a rotating airstream created by a special impeller and guide vanes. The dust particles are thrown against the cylinder walls, separating the dust-laden air in the separation section. The polluted air (about 5%) is separated in the mini cyclone and dust is discharged through an airlock valve. The air from the mini cyclone is returned to the Cyclofan's suction side. With high rotational speed, the Cyclofan achieves up to 98% dust-separation efficiency for barley and other grains, surpassing conventional fans and cyclones.

## Axial Fan.



The Cimbria Axial Fan is a very efficient, low-pressure fan specially developed for aspiration from Cimbria continuous flow dryers. The Axial Fan is equipped with a robust nylon impeller, but, unlike all other Cimbria fans, the Varifan air volume regulator which is typically mounted externally is installed in the actual fan housing.

Axial Fans are not suitable for dust separation, but their benefits lie primarily in their ability to aspirate large amounts of air at low cost. Axial Fans can be mounted horizontally or vertically.

# Super Cyclofan.



**The Cimbria Super Cyclofan achieves efficiency exceeding 99% thanks to a double impeller system, stainless steel cylinder and larger separation section.**

The Cimbria Super Cyclofan works on the principle of the recovery of energy by means of a regenerative impeller. This turbine rotates at a reduced speed compared to the intake impeller – and transfers the energy from the rotating air back to the motor. This patented product provides unsurpassed dust separation combined with low energy consumption. As a result, the application of robust and self-cleaning centrifugal dust separation has moved into areas where a dust filter has traditionally been the only viable solution.

# Centrifugal Fan.



The Cimbria Centrifugal Fan type CM is a medium-pressure fan having backward curved impeller blades manufactured from steel plate. The impeller is self-cleaning and dynamically balanced. The CM Fan is typically used as an aspiration fan on a Cimbria cleaner or as an aeration fan in e.g. silos or flat storage. As standard it is equipped with throttle valves, but it can also be supplied with the specially developed Varifan.

## Accessories.



### Rain Caps.

Rain caps protect dryer exhaust openings, preventing moisture and debris entry during inclement weather.



### Cimbria Varifan.

The Cimbria Varifan is an air volume regulator shaped like a rosette, and is placed at the inlet of the fan. The Varifan allows you to regulate air volumes between 60% and 100% which simultaneously adjusts the energy consumption of the motor. The entire Cimbria fan range is equipped with Varifans.



### Cimbria Air-Lock Valve.

In Cimbria's dust-collecting Cyclofans, the Airlock Valve is mounted between the bottom outlet of the mini cyclone. It ensures a uniform, discharge of dust and other particles, while minimising the amount of air escaping through the outlet. Depending on the dust volumes, Cimbria can offer the airlock for direct mounting on the Cimbria Q-20 (200x200 mm) or Q30 (300x300 mm) pipe system.



### Cimbria Silencer.

Cimbria delivers cylindrical silencers, which can minimise the noise emission from the entire range of Cimbria fans. The silencers are made of galvanised plate and insulated with mineral wool, which is attached between the shell and a perforated plate to absorb noise.

To achieve the correct solution for noise reduction, please contact Cimbria's technical department, who will calculate the proper size and expected performance.

## Compact Easy To Fit Solutions.



## Improving Working Conditions Worldwide.

Thousands of Cimbria Cyclofans are in operation throughout the world, working under every imaginable climatic condition. Whether you require 24/7/365 aspiration from process drying installations to seasonal operation in connection with e.g. aspiration from seed-processing lines, the Cyclofan has proven to be an exceptionally reliable machine. Cyclofans offer better dust-separating efficiency than other dust separating fans with the same energy consumption. The wide range of fans, combined with all required additional accessories, makes the Cimbria Cyclofan a cost-effective solution wherever dust emission levels need to be reduced.



## Vertical mounting.

The entire Super Cyclofan, Cyclofan and Axifan range can be vertically mounted, providing flexibility in the overall solution. The Cyclofan range is well suited as aspiration fans for Cimbria dryers, where large volumes of relatively moist air must be handled as efficiently and reliably as possible. Cimbria Cyclofan technology is a unique solution that can be used wherever local legislation stipulates maximum emission values.



## Horizontal Mounting.

All models of Super Cyclofan, Cyclofan and Axifan can also be fitted in a horizontal position. Regardless of the mounting position, the dust-separation efficiency will remain unchanged. This flexibility in mounting, in combination with the fact that the Cimbria Cyclofan is designed as a compact and sturdy machine, makes integration into a complete installation easy and fast.



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