GEA SANICIP® II bag filter

Leap forward with your process,
your maintenance, your performance.

Engineering for a better world.

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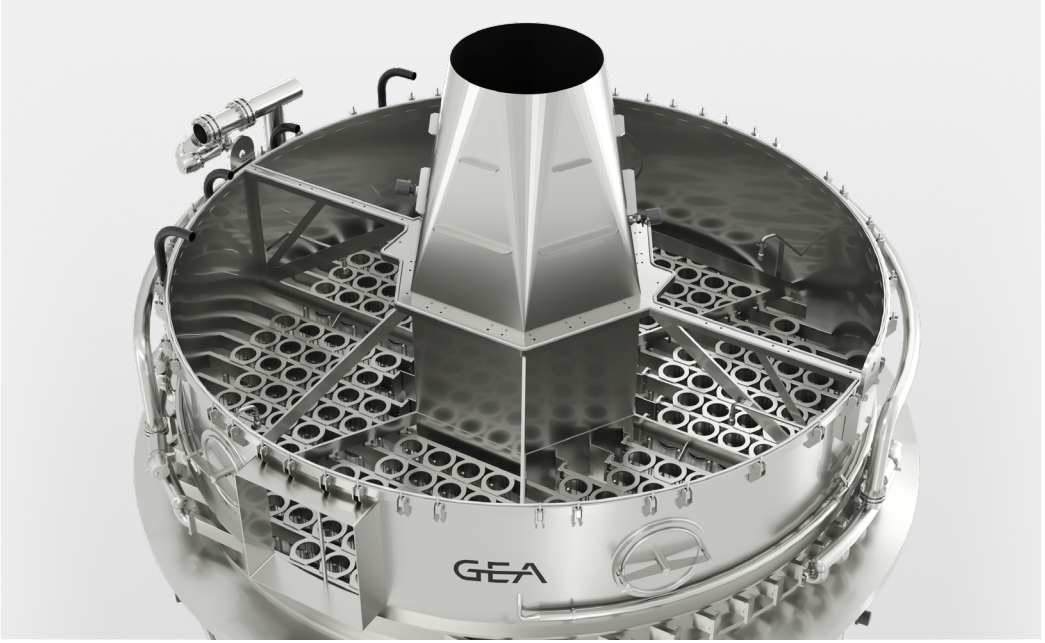

The new GEA SANICIP® II (patented) bag filtration system for food and dairy spray dryers is engineered to optimize not only your filtration but your entire spray drying process and performance, while providing a wide range of operational benefits. It will allow you to focus on what matters the most in your spray drying process.

Improved process
The new dedusting system includes an improved reverse jet, maintains and controls the pressure drop across the filter better than before and extends Clean-in-Place (CIP) intervals. The result is higher production rates and better up-time.

The new filter has shorter filtration bags, suffering from less turbulence. There is less mechanical wear and up to 50% longer bag life, lowering maintenance costs.

A new vertical inlet improves the airflow around the filter bags and, together with shorter filter bags, helps to distribute the powder more evenly.

Simplified maintenance
The bag and cage replacements have become easier. Cages are lighter than before and are fabricated in one piece, making them easier to handle. The requirements for manual lifts are limited and operator safety improved.

Better performance
A better control of the pressure drop combined with fewer CIPs, simplified maintenance and longer bag life time allows for a more reliable process, more uptime, higher yearly throughput, reduced maintenance costs and better performance. All adding up to a reduction in total cost of ownership.

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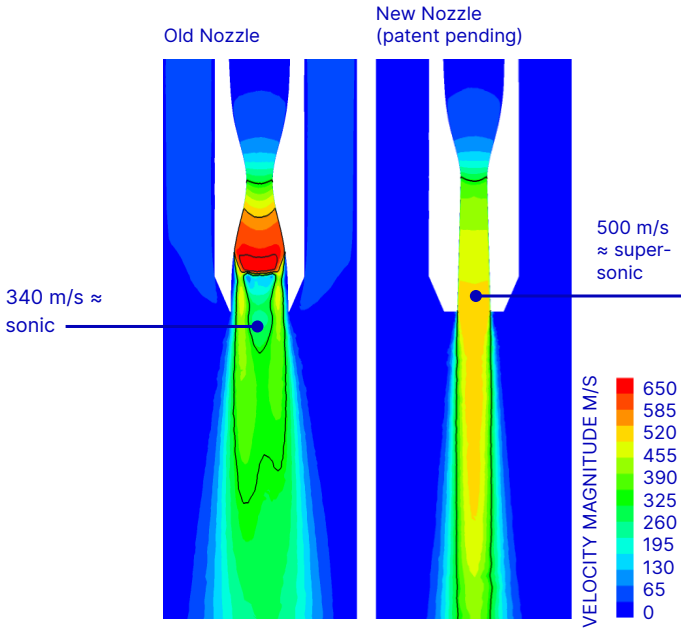

Longer run time, less CIP, higher productivity, easier maintenance, smaller plant footprint, lower TCO

The SANICIP® bag filtration system has been long trusted by dairy and food processing companies to remove residual powder from spray dryers in a safe and environmentally sustainable way. With the new SANICIP® II, GEA engineers have refined the design to improve practicality and reduce costs for dairy and food powder manufacturers.

Using advanced Computational Fluid Dynamics (CFD) studies, GEA has analyzed each element of the filter to include detail, and sometimes radical, improvements that make a big difference to overall performance and TCO.

Better dedusting for longer run time
Improved dedusting has been achieved by redesigning the super-sonic nozzles at the heart of the dedusting system.

These deliver a pulse of air to remove powder from the outside of the bags more efficiently allowing a consistent pressure loss to be maintained. This reduces the need for CIP and extends the run time indefinitely for higher productivity especially during peak times.

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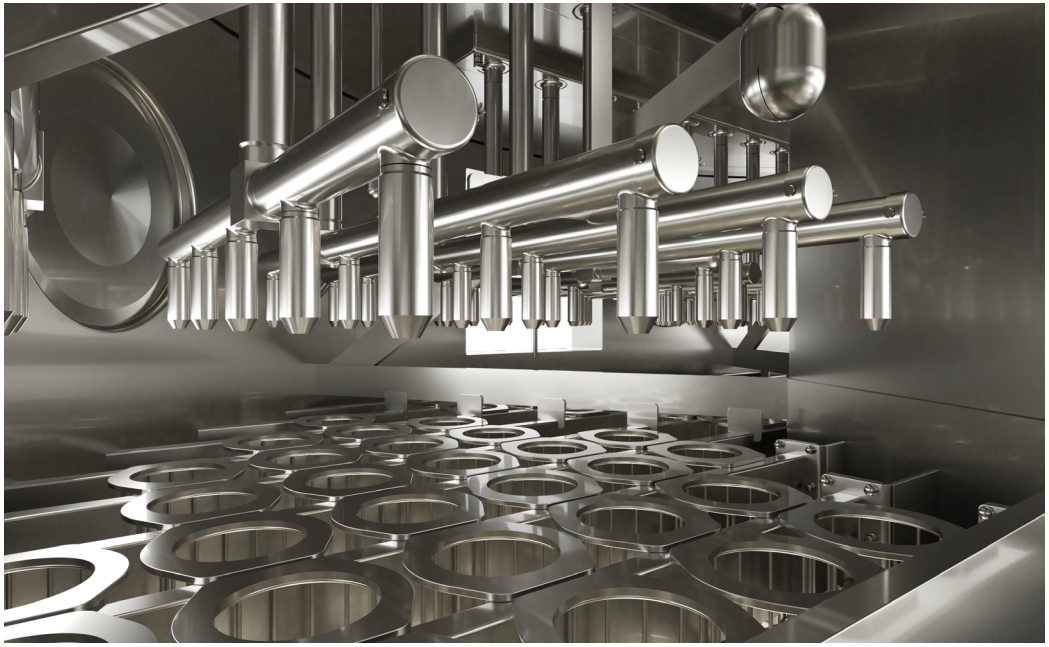

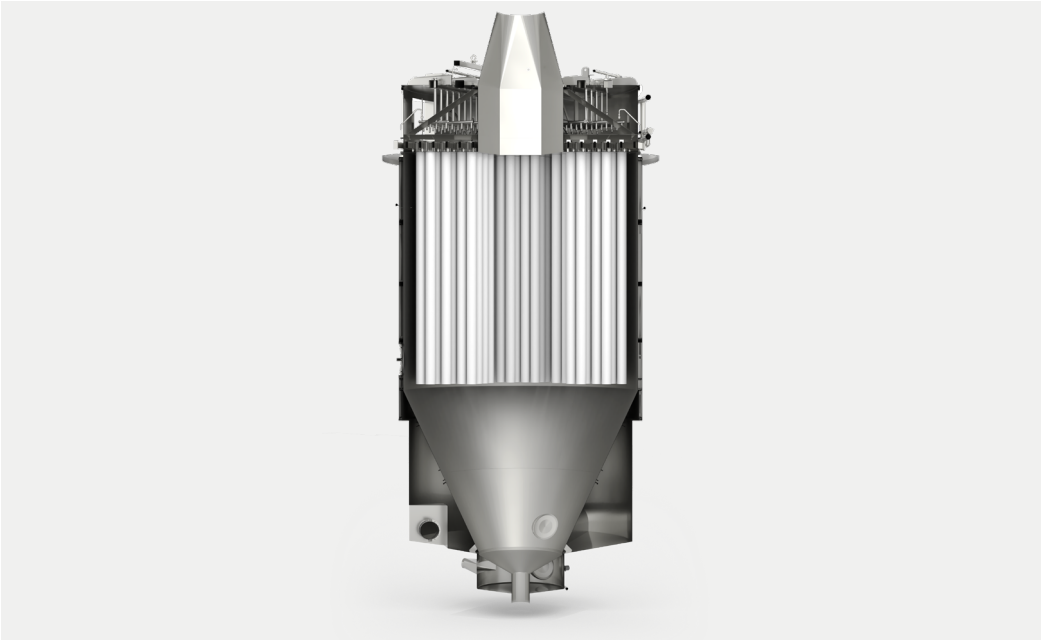

Shorter bags – same filtration area
The filter bags and cages have been shortened to just 4.5 meters, reduced in diameter and increased in number. This makes them easier to handle and less prone to mechanical wear (extending life by up to 50%), while maintaining the filtration surface area and efficiency at previous levels. Building height requirement may be lower: critical in restricted areas and earthquake zones. There are no cage fixings, so no loose nuts, bolts or brackets.

Better airflow and reduced footprint
Finally, by switching the air inlet to the top of the filter rather than the side, the air flow within the dryer has been improved and the ducting is simpler allowing the overall footprint of the plant to be reduced.

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