



## NEW CLEANING PORTFOLIO

NO COMPROMISE IN GRAIN CLEANING

Peter Striegl.

Innovations for a **better world.**

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# Cleaning System Vitaris.



# New Cleaning System Vitaris

## Market requirements

- Efficient removal of impurities.
- Increasing food safety regulations.
- Lower energy consumption.
- Flexibility in plant design.



The image shows a close-up of a white industrial air-recycling aspirator (MVST) mounted on a metal structure. The device has a large, rounded, white body with a viewing window. In the background, there are various industrial components, including pipes, a metal rack, and a cylindrical unit. The scene is brightly lit, and the overall color palette is dominated by white and metallic tones, with a yellow and green circular graphic overlay on the left side.

**Air-recycling aspirator.  
MVST.**

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# Air-recycling aspirator

## Unique compact design

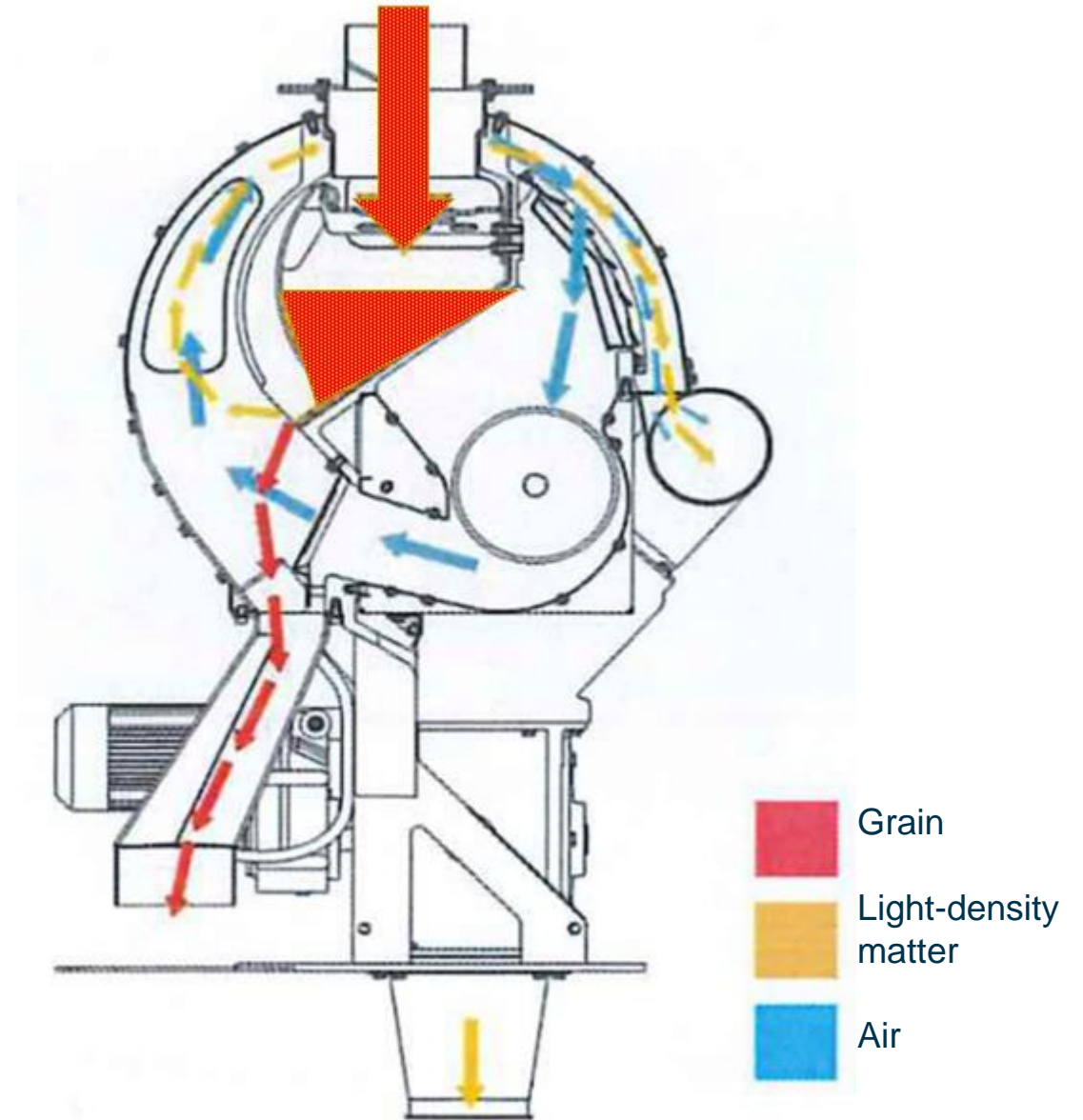
- High efficiency of removing of light impurities.
- Low installation height (30% less than traditional air-recycling aspiration channels).
- Can be installed on top of the separator.
- The removal of light impurities prior to sieving prevents blockages, and increases the efficiency of the sieving of fine impurities.



# Air-recycling aspirator

## Higher energy efficiency.

- Reduced energy consumption by using frequency converter for fan, compared to systems using throttling valves.
- 90% of the process air is recirculated.
- Energy reduction of up to 30%, compared to a traditional air-recycling aspirators.
- Two machine sizes:
  - 12t/h / 25t/h (fine / coarse cleaning)
  - 24t/h / 50t/h (fine / coarse cleaning)





# Separator Vitaris. MTRD.

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# Separator

## 3 sieve decks.

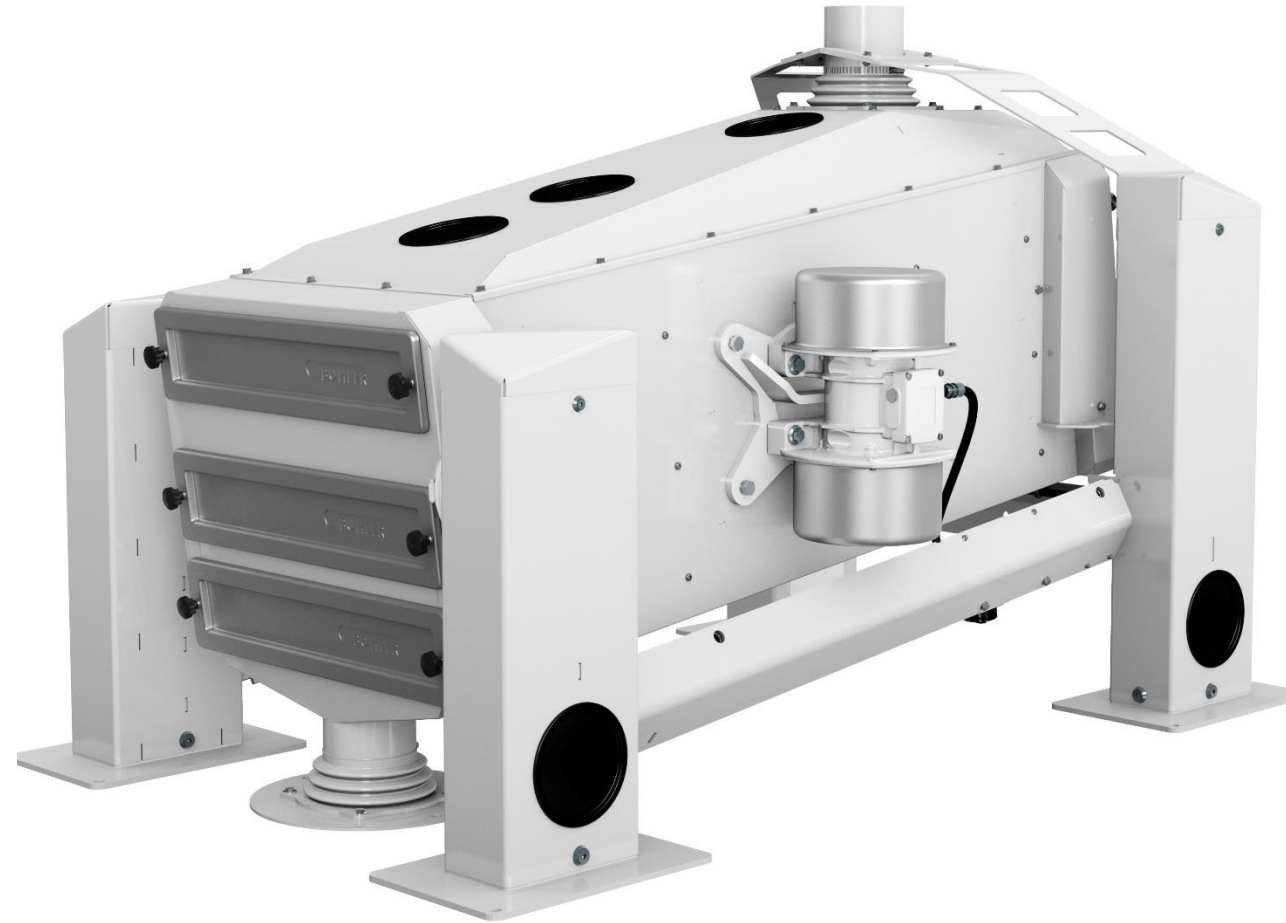
- Because of the ideal stroke and angle of the motor, we can reduce the sieve openings of the coarse sieve to about 6mm. (wheat)
- Two sieve layers for fine impurities separation.
- The sieves can be quickly tensioned and loosened.
- Sieve change in less than 5 minutes.
- Capacities based on 2 sizes:
  - 12t/h / 25t/h (fine / coarse cleaning)
  - 24t/h / 50t/h (fine / coarse cleaning)



# Separator

## Food-safe design.

- The sieves of the machines are made of stainless steel, which fulfills the food safety requirements.
- The synthetic parts of the machine are all FDA-approved.
- No more nails or screws needed to fix the stainless steel sieve on the frame.
- Safe operation and low dust emissions because of closed outlets.





# Combistoner Vitaris. MTCH.

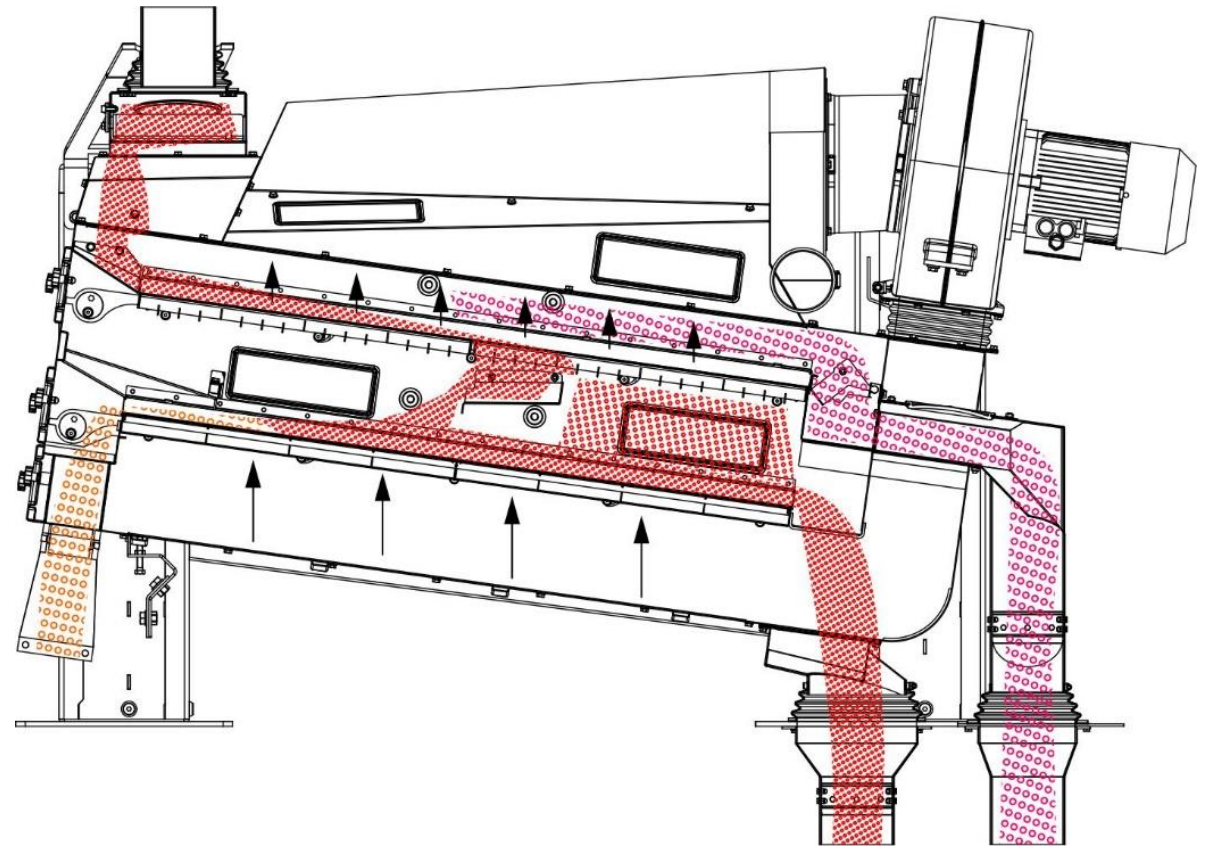
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# Combistoner

## Easy operation.

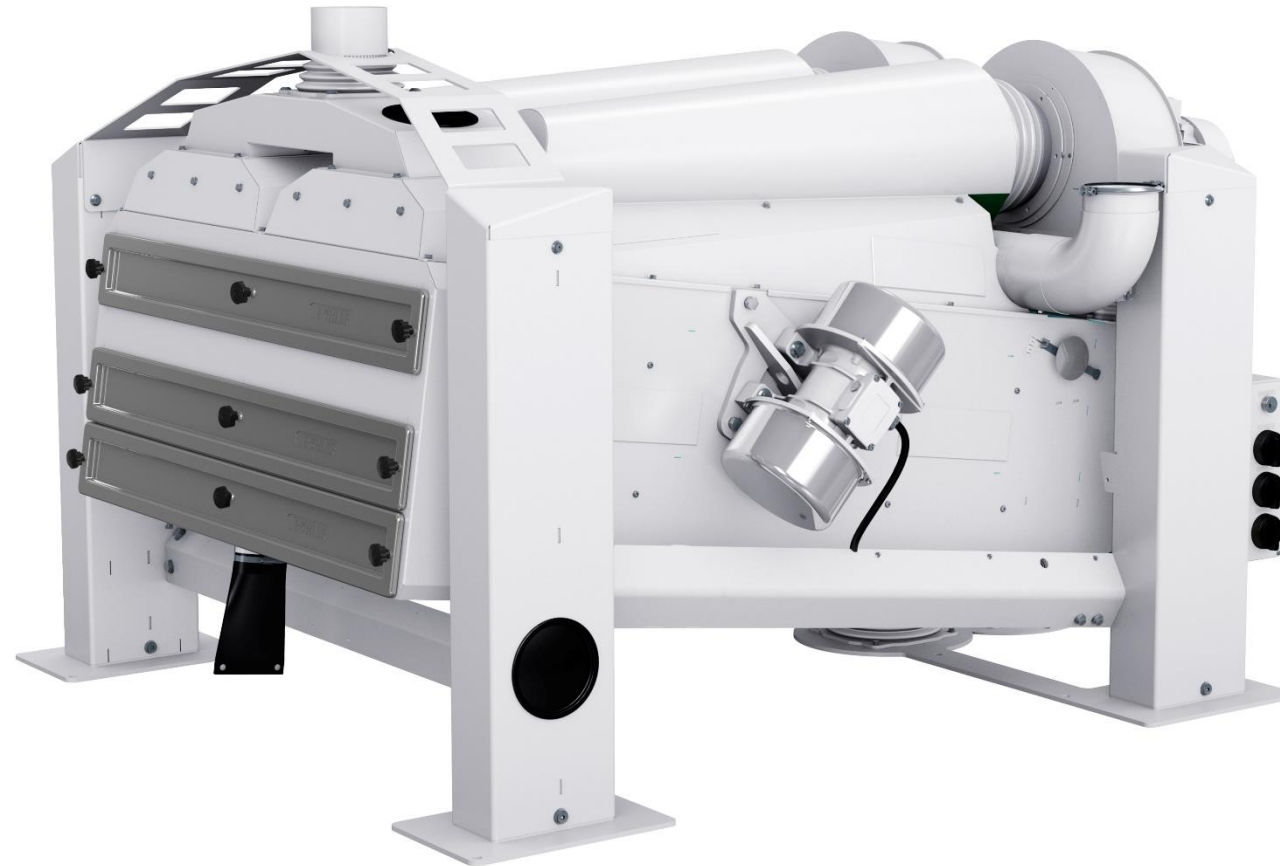
- Combistoner function: removal of stones and grading into heavy and mixed fraction.
- The sieves of the machines are made of stainless steel.
- No use of wood, plush or felt.
- Safe operation and low dust emissions because of closed outlets.



# Combistoner

## High energy efficiency.

- Available with fresh-air or air-recycling operation.
- The dust separation of the air-recirculation model is integrated in the machine.
- Air-recycling and use of frequency converter reduces the energy consumption up to 15%
- Capacities based on 2 sizes:
  - 12t/h
  - 24t/h





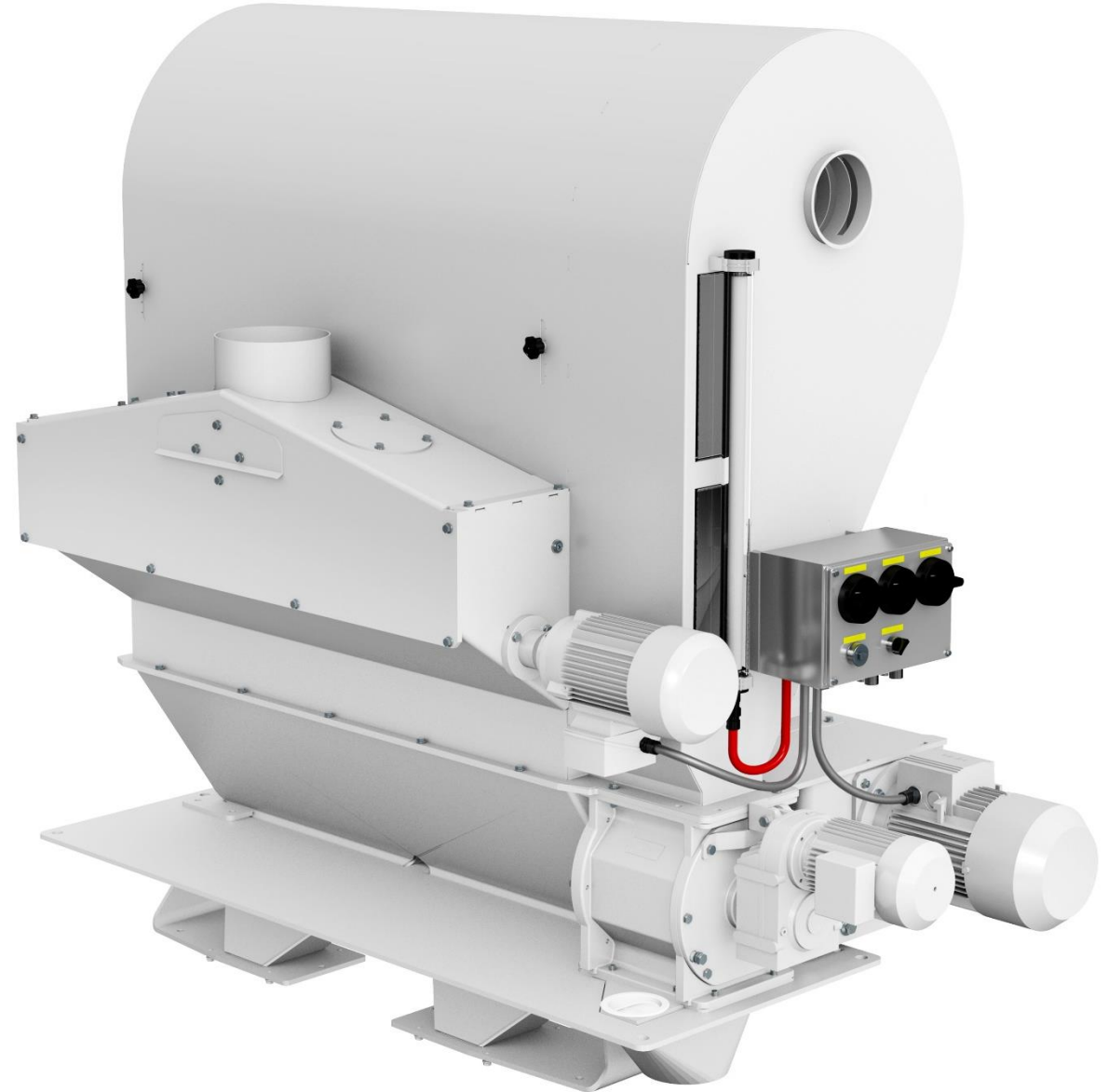
# Air-recycling aspiration channel. MVSS.

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# Air-recycling aspiration channel. High energy efficiency.

- Air-recycling and the use of frequency converter reduces the energy consumption significantly.
- Up to 15% less energy usage than traditional air recycling aspirators.
- 90% less fresh air usage than the aspiration channels (fresh air).
- Significantly reduced need of filter surface.



# Air-recycling aspiration channel. Air flow control.

- The air flow is controlled with frequency converter.
- No more energy losses due to air flow regulation (flaps)
- The air flows can easily be adjusted at the machine or via plant control system.
- - 12t/h / 25t/h (fine / coarse cleaning)  
- 24t/h / 50t/h (fine / coarse cleaning)





# Combicleaner Vitaris. MTKC.

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# Combicleaner

## Modular concept

- Modular concept. Machines can be installed on different floors, or stacked on top of each other.
- The single machines are fitting perfectly together and are working independently.
- The different single machines are fitted together on site. This leads to easier transport and installation, compared to one big unit.
- Each machine using air is controlled by a frequency converter.
  - Less energy consumption
  - Easy adjustment at the machine (potentiometer)
  - Adjustment based on a recipe via PLC possible.



# Combicleaner

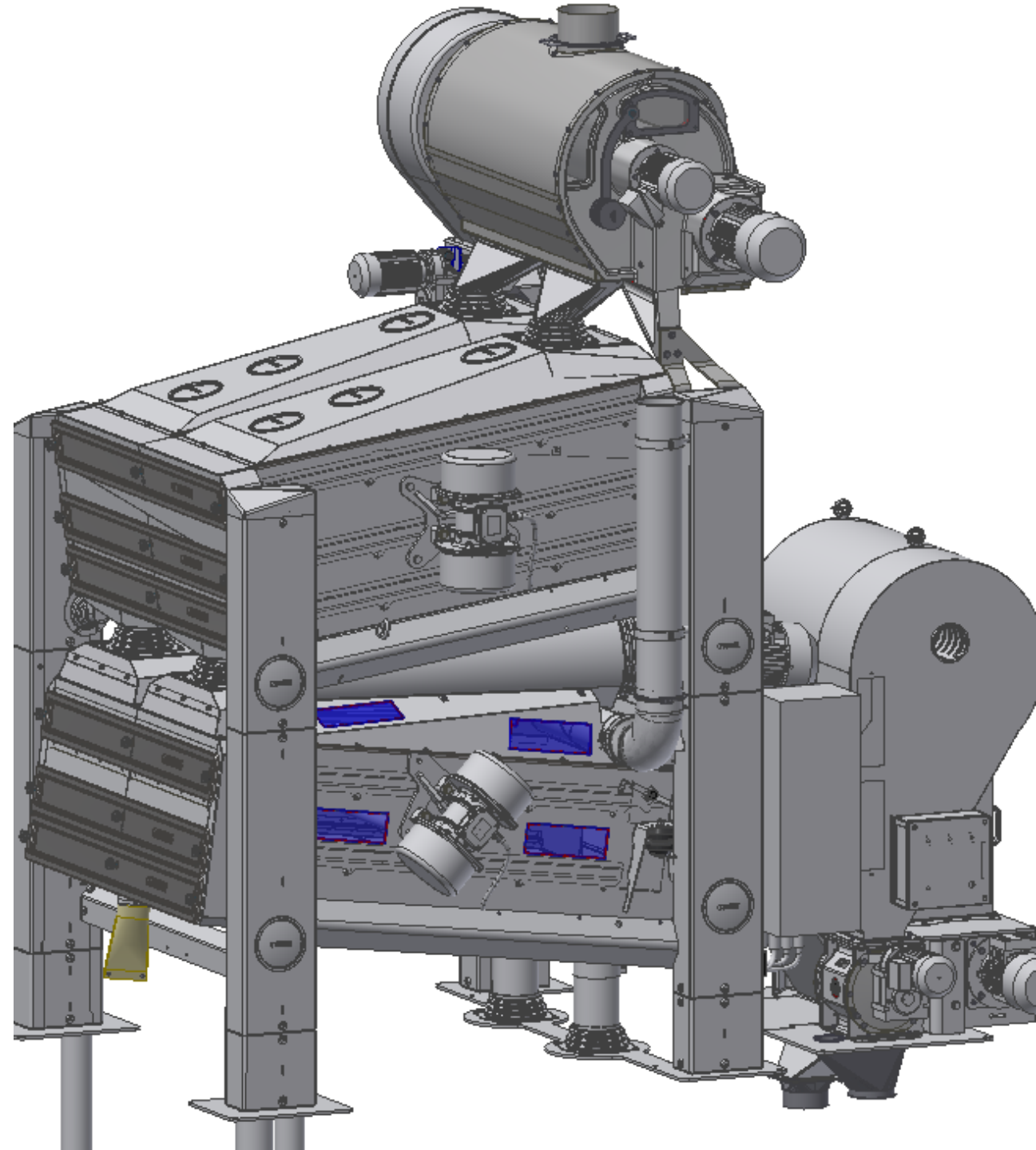
## Low dynamic forces.

- The independent motors of the Separator and Combistoner leads to partly compensation of the dynamic forces on the building.
- Because of the reduced dynamic force, the cost for the building will be lower.
- Separator and Combistoner have individual drives to achieve best cleaning efficiency.
- The cleaning processes are optimal: There is no combined air flow, which interferes with each other.
- Capacities based on 2 sizes:
  - 12t/h / 24t/h



# New Cleaning System Vitaris Conclusion

- Modular concept of different mechanical cleaning machines.
- Efficient removal of light, coarse, and fine impurities, and stones.
- Fulfills increasing food safety regulations.
- Lower energy consumption.
- Easy to adjust and possible to operate by different recipes from plant control system .



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