NEW CLEANING PORTFOLIO

NO COMPROMISE IN GRAIN CLEANING

Peter Striegl.
Cleaning System Vitaris.
New Cleaning System Vitaris
Market requirements

• Efficient removal of impurities.
• Increasing food safety regulations.
• Lower energy consumption.
• Flexibility in plant design.
Air-recycling aspirator. MVST.
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)
Innovations for a better world.

Separator Vitaris.
MTRD.
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

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.
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)
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Combicleaner Vitaris.
MTKC.
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.
Innovations for a better world.

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BUHLER