

CLEANING / MAIZE / ANIMAL FEED / KDC PLUS

Improve Feed Quality and Silo Efficiency – Efficient Cleaning of High Moisture Maize

Gaec du Québec, a grain producer and contractor in the north-west of France, specializes in growing and cleaning grain, including maize, for animal feed. In addition to cleaning its own crops, the farm also provides grain cleaning services for other farmers in the region.

THE CHALLENGE

High-Moisture Maize

In 2022, Gaec du Québec began cleaning grain with the **KDC 4000** from Kongskilde Industries. As maize is one of the farm's main feed crops, high-quality cleaning is essential to maximize feed efficiency, optimize silo storage and ensure the nutritional value required for healthy animal growth.

Maize has a high moisture content (30-40% H₂O) and the challenge was to remove non-nutritive waste, such as crushed corn cobs, before storing the maize in silos. Uncleaned maize results in wasted storage capacity and reduced feed quality for pigs. In addition, the heavy weight and moisture content of the maize risked clogging traditional cleaning systems.

- **High moisture** made cleaning difficult.
- **Non-nutritive waste** reduced feed quality.
- **Wasted silo space** due to uncleaned maize.
- **Feed efficiency at risk** from impurities.
- **Clogging issues** in traditional cleaning systems.



High-moisture grain presents significant challenges for farmers, including increased susceptibility to mold growth and pest infestations. Additionally, the extra drying time and storage care required can lead to elevated costs and resource allocation issues, impacting overall farm management and productivity.

THE SOLUTION

The farm collaborated with Kongskilde Industries' experts in France to tailor the KDC 4000, a versatile grain cleaning system designed to handle diverse crop types and moisture levels. A test setup was conducted to customize the machine for wet maize cleaning.

The system was further adjusted based on test results:

- **Inner Screens:** Standardized to Ø 15 mm for optimal kernel retention.
- **Outer Screens:** Adjusted to 4.0x16.5 mm to eliminate kernel loss.
- **Machine Angle:** Increased to 6–7° for smooth transport.
- **Aspirator Nozzle:** Modified to enhance vacuum performance.

THE RESULTS

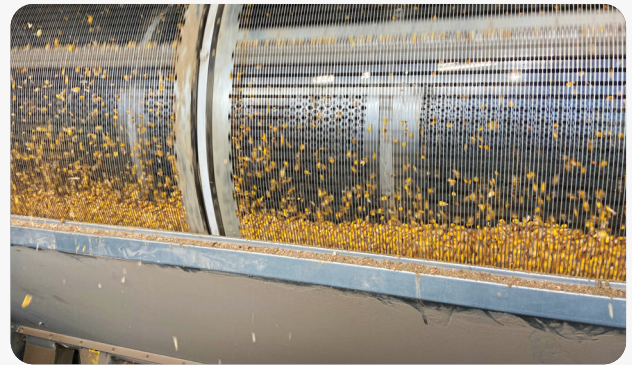
The KDC 4000 successfully cleaned the wet maize, meeting and exceeding expectations by significantly reducing non-nutritive waste, which allowed more storage capacity to be allocated to nutrient-rich feed. The cleaner maize improved overall feed quality, enhancing the nutrition for pigs, which is expected to accelerate their growth and boost farm profitability. Additionally, the system's effectiveness in minimizing waste and optimizing silo storage contributed to improved operational efficiency for Gaec du Québec.

Why the KDC is a game-changer:

- **Enhanced Feed Quality:** By eliminating non-nutritive waste, the KDC 4000 ensures that stored maize is nutrient-dense, promoting healthier and faster-growing pigs.
- **Increased Operational Efficiency:** The cleaning system optimizes storage space, reducing the need for additional silos and lowering overall costs.
- **Reliable Performance:** Customizable configurations, including screen sizes and airflow adjustments, ensure the KDC 4000 meets the unique needs of wet maize cleaning.

Ready to transform your grain cleaning?

Get in touch to start the conversation and discover how our cleaning solutions can improve your operations.



KDC drying of high-moisture maize



KDC screen adjustment

"I highly recommend the KDC 4000 because of its ease of use, its cleaning efficiency while maintaining a high throughput, and its simplicity of maintenance. It handles a wide variety of products, offering thorough cleaning or separation of cereals while ensuring compliance with trading standards and optimal grain preservation."

- Thomas Troisdeniers,
Gaec du Québec, France