



Case Study

Oilseed Elevator Upgrade - Capacity Upgrade and hygiene Improvements

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The largest UK producer of rapeseed / canola oil recently upgraded their main silo feed elevator to incorporate 4B's advanced anti-static AM Nyrim elevator buckets. Increasing capacity by reducing material build-up in the buckets and improving hygiene throughout the production process.

The Challenge



Oil and dust sticking to the traditional fabricated steel elevator buckets.

Largest UK producer of rapeseed / canola oil required an increase in the tonnage capacity of their main silo feed elevator along with steps to improve hygiene and reduce the risk of salmonella contamination throughout their production facility.

Oil and dust sticks to the traditional fabricated steel elevator buckets, building up and reducing the capacity of the elevator. Over time these deposits grow and can reduce the capacity of the buckets. These then start to break off in lumps and can contaminate the production process further along the refining process.

The Solution

Replacing the mild steel buckets with like for like would have no benefit in that they are susceptible to damage and product build up.



The advanced Nyrin material is inherently antistatic without the need of additives.

Proposing the newly developed AM Nyrin elevator buckets offered more robust, higher capacity throughput without needing to carry out any drive changes. The material is not damaged by knocks and bumps as it goes around the elevator.

The advanced Nyrin material is inherently antistatic without the need of additives to reduce surface resistivity.

Results

- Increased throughput of the elevator.
- Spark resistant elevator materials introduced into the process.
- Low coefficient of friction and flexibility of Nyrin material stops any build of deposits on the buckets.
- Improved hygiene throughout the production process.
- Impact resistance of Nyrin is less susceptible to damage than fabricated mild steel buckets.

The 4B Atlas AM Elevator Bucket



The Atlas AM Nyrin elevator bucket non-stick properties are enhanced by its smooth surface finish and open design.

The heavy duty Atlas AM Nyrin elevator bucket has excellent surface resistivity dissipating properties, thanks to its antistatic material, making it ideal for ATEX applications. The bucket's non-stick properties are enhanced by its smooth surface finish and open design.

The Atlas AM is a very tough, long life elevator bucket with ultra heavy duty design and construction; the material makes this bucket up to 6 times stronger than other industrial elevator buckets.

A very versatile elevator bucket, the Atlas AM is suitable for heavy industrial applications as well as grain and sticky materials.