

FGP Food Grade Precleaner Eliminates 98% of Carryback for Detergent Plant

Industry

Soap and Detergent Manufacturing

Application

Detergent processing

Product

FGP Food Grade Precleaner

Objective

- Reduce product waste
- Reduce carryback
- Reduce maintenance time

Conveyor Detail

White PVC



Problem:

The main discharge conveyor located at a large detergent products plant was experiencing excessive carryback, belt slippage, and equipment reliability issues. The brush cleaner that was supplied with the original conveyor design had large bristles that accumulate product, instead of removing it from the belt and collecting it below. This caused the bristles to seize and rendered the cleaner ineffective. The maintenance team had to physically clean or exchange and adjust the brush regularly to keep the line moving and product flowing.

Solution:

While specifying fasteners for another belt, a Flexco representative was alerted to the issues facing the detergent line. Given the success of the Flexco FGP Food Grade Precleaner in the food industry, the representative recommended it to handle the abrasiveness and high-granularity of the powdered detergent. In this case, the FGP Food Grade Precleaner with a food-grade, metal detectable UHMW blade was chosen because of the high wear characteristics of the UHMW and the fact that metal detectors further down the production process could detect the blade material if a small piece were to break away.

Result:

The Flexco FGP Food Grade Precleaner made an immediate impact on the detergent line, eliminating 98% of the carryback and increasing the operation's output by at least 100 kg per day. The operations manager also noticed that conveyor components that were prone to carryback from the belt were now operating more reliably and for longer periods of time. Finally, the maintenance team was not only happy with the lack of cleanup and the fact that belts were lasting longer; they were also impressed that the tensioner provided consistent blade-to-belt contact, eliminating the need for cleaner adjustments and less maintenance checks overall.