

FGS Food Grade Secondary Cleaner Reduces Waste By Up to 98% at Major Confectionery

Industry

Confectionery

Application

Crushed nut candy line

Product

FGS Food Grade Secondary Cleaner

Objective

- Reduce carryback
- Decrease product waste
- Reduce clean-up and maintenance

Conveyor Detail

60" wide steel belt



Problem:

A confectionery operation was experiencing large amounts of waste on the return side of its conveyor since the product (molasses with nuts) was sticking to the steel belt and falling to the floor. The problem was so severe that it posed a slip hazard and required twice the amount of time to clean the conveyor. That meant that the maintenance department had to invest twice the amount of effort to clean this conveyor, creating an undesired amount of resource drain.

The molasses was being transferred on a 60" wide steel belt. A fixed-blade precleaner was already operating on the conveyor, but the efficiency was less than 70%. Using a fixed-blade style of secondary cleaner was not an option because the device had to be low profile and fit between the conveyor structure and the collection bin located below the conveyor belt.

Solution:

Installing a secondary cleaner was crucial, so the maintenance team searched for a solution. After reviewing multiple options, they decided a Flexco FGS Food Grade Secondary Cleaner would be the answer. The crew installed the FGS cleaner above the collection bin, which was key to the customer collecting the product to sell for a profit. The self-adjusting blade-tensioning feature of the FGS allows the team to run the cleaner on the steel belt with a metal detectable UHMW blade that is strong enough to remove the hardened molasses and soft enough to avoid damage to the belt. The low profile design of the cleaner also allows it to clear the collection bin so it could be retrieved and changed periodically without interference to the operation.

Result:

The installation of the FGS Food Grade Secondary Cleaner reduced product waste on this line by 94 to 98 percent. The time that it takes to clean the conveyor during regularly-scheduled maintenance is now on par with other production lines, and the captured and contained product can now be sold for a profit to forage producers. With a line that runs five days a week, the savings in man hours also allows the team to focus on repairs and other mission-critical operations. In addition, the facility does not have to clean up the carryback that was previously falling onto the floor, thus reducing the slip hazards and meeting OSHA minimum requirements.