

# INSIGHTS™

Belt Conveyor Maintenance

TECHNICAL SOLUTIONS FOR BELT CONVEYOR PRODUCTIVITY

## Avoiding Product Carryback on Light-Duty Belts

It's quite evident from the material caked on your belt, rollers, and pretty much every component on your system that you have a problem with material carryback. In the past, it seemed to be inevitable – a cost of doing business. But when you're trying to trim your budget, every ounce of wasted product and every shut down for repair or replacement is adding up. Add in the cost of having your maintenance team clear the excess scrap, along with trying to clean and sanitise your system, and your pocketbook is shrinking.

Your product carryback is actually affecting every part of your operation, resulting in decreased product output, lost productivity because of maintenance and repairs, and a dwindling bottom line. It's time to do something about it. But what can you do to keep your materials on the belt throughout the production process? Install an efficient belt cleaner.

### Homemade Cleaners

Since your maintenance team knows the ins and outs of your conveyor, it's natural to think that they can develop a cleaner that will conform perfectly to your system. And oftentimes, they do just that. Scrap conveyor belting, spare pieces of plastic, and even stainless steel are used to create devices that scrape the belt. While this is an inexpensive design that can remove some carryback, it is not always the best for the health of your belt or product removal from the belt, and it is far from sanitary.



Proper tensioning is critical for efficient and effective cleaning. Many homemade scrapers apply too much pressure and cause damage to the belt or splice, while others do not apply enough pressure, allowing carryback. Worse still, some systems have variations in the belt or pulley that render a rigid tensioning system ineffective.

Without an appropriate tensioning system, the cleaners are not providing constant blade-to-belt contact and product is getting past the homemade cleaner, allowing product to stick to the belt and conveyor components.

Also, many homemade cleaners and their hardware or mounting systems are not made of food grade materials and have crevices that can actually harbor bacteria and other potential contaminants. In addition, the complexity of their construction can make cleaning and sanitising a difficult task.

### Engineered Cleaners

Another option is to buy a cleaner specifically engineered to work with light-duty belting in food applications. Most engineered cleaners have been field tested and proven to be gentle to your belting, but tough enough to remove even the stickiest of materials.

The effectiveness of engineered belt cleaners is evident from the moment they are placed on the system. They contain tensioning mechanisms for optimal interaction between the cleaning blade and the belt, instead of relying on a fixed blade, as is often the case with homemade cleaners. In fact, some operations have noted as much as a 60% reduction in scrap off the line when using an engineered cleaner rather than a homemade cleaner.

Engineered cleaners that are specific to the food industry are also made from food grade materials and are designed to ensure that cleaning and sanitising is quick and easy. For extra peace of mind, food operations should seek out engineered cleaners that meet strict sanitary guidelines and are certified by the USDA for use in their industries.



## Belt cleaning solutions from Flexco

Flexco offers solutions for carryback in food processing applications.

### Flexco FGP Food Grade Precleaner

The FGP Food Grade Precleaner from Flexco is easy to install, easy to maintain, and disassembles in a snap for regular cleaning and sanitizing. The FGP Precleaner works on any belt from 4" to 60" (100 mm to 1500 mm), and the blade is available in white, blue, metal detectable blue, and dual durometer blue FDA-compliant food grade material. The FGP Precleaner is the only precleaner in the industry that is Health Canada approved, baking Industry Sanitation Standards Committee (BISSC) verified, EU 1935/2004 compliant, and USDA certified for use in meat, poultry, and dairy applications.

### Flexco FGS Food Grade Secondary Cleaner

The FGS Food Grade Secondary Cleaner is made from 100% solid 304 stainless steel. It has a low installation profile and is easy to operate, install, and maintain. The FGS cleaner design allows for quick disassembly and reassembly for regular cleaning operations such as washing, foaming, and rinsing. The FGS Cleaner works on any conveyor belt from 12" to 72" (300 mm to 1828 mm). FGS cleaner blades are made of FDA-compliant food grade materials and are available in white or blue, metal detectable blue, and metal detectable dual durometer blue. The FGS cleaner has been designed to be used in industrial baking, confectionery, protein, pet food, and other operations where a secondary cleaner is necessary. All FGS Secondary Cleaners are BISSC verified and EC 1935/2004 certified.

#### Designed for Food Processing Applications:

The FGP Food Grade Precleaner and FGS Food Grade Secondary Cleaner are not only made of FDA-compliant materials, but are engineered to work in the stringent baking and confectionery industries. Their design is BISSC verified for industrial baking applications and CE 1935/2004 certified.

#### Easy to Disassemble for Sanitization:

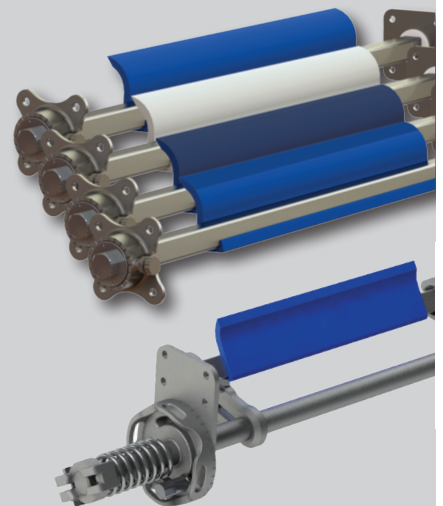
Within less than a minute, the tension can be removed from the cleaner, the blade snapped off, and the components pulled out of the mounting system. This allows for easy washing, sanitizing, and rinsing of the cleaner components. Reassembly is quick and easy – less than a minute and you are ready to run product again.

#### Blade Options:

Rather than segmented blades that can harbor contaminants, the FGP and FGS have a single piece blade that snaps onto the stainless steel pole. Blades are available in FDA-compliant white or blue UHMW, metal detectable blue UHMW, and metal detectable dual durometer blue.

#### Effective Tensioning System:

The spring tensioning system is completely external, allowing for easy access. The operator simply adjusts the torsion hub to the desired tension setting and tightens a set bolt. It is simple and easy to operate.



## More food grade product solutions from Flexco

Flexco offers both endless splice solutions,  
as well as metallic and non-metallic fastening solutions.  
Visit [www.flexco.com](http://www.flexco.com) for more information.

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