

Solution Guide



uni MPB C
Straight Running Belt

- Industry > **Snack Food**
- Application > **Salt and Seasoning Discharge**
- Description > **Potato Chips are Seasoned and/or Salted before packaging**

This application is typically an abrasive because the salt and seasoning gets inside the belt hinges and pin holes. Belt stretch due to pin wear is usually the biggest issue.



uni MPB closed in PP material with PA6.6 pins on the discharge from seasoning, also used for inspection.

Problems

> Problem 1

Belt stretch is a problem due to pin wear. Eventually the belt will stretch to a point where it does not engage with the sprockets properly. Diameter of the pin and material choice are important.

> Problem 2

Product contamination due to the fraying of the fabric belt as it makes contact with the frame. Fabric pieces were found in a retail bag of chips undoubtedly from the damaged fabric belt.

> Problem 2

The belts are typically 36 in. to 52 in. wide and sometimes can be an incline belt with product supports (flights/cleats/pushers). These belts need a center notch in the product supports to prevent deflection on the return. This notch causes damage to the chips and creates waste.

Solutions

> Solution 1

The uni MPB belt has an 8 mm (0.31 in.) pin diameter that is 20-30% larger than the competitors' pins. This projects a larger surface contact area for the wear surface and reduces the stretch over time due to pin wear. In addition nylon PA6.6 pin material is a more wear resistant option than the PP or POM material typically offered by competitors.

> Solution 2

The positive tracking of the uni sprocket system eliminates tracking issues which lead to product contamination.

> Solution 2

The larger pin of the uni MPB provides much better beam strength (resistance to bending) so the center notch can be eliminated with SS pins.