

Solution Guide



uni MPB C
Straight Running Belt

Industry > **Poultry**

Application > **Cage Dump**

Description > **This is Live birds come to the processing plant on flatbed trucks and are dumped onto a slow moving conveyor.**

This is one of the most critical belts at a poultry plant. Perpendicular to the belt birds are hoisted up in a cage and dumped down onto the belt. This process repeats about every 30 seconds.



uni MPB in PEI blue material on a cage dump conveyor



Problems

> Problem 1

Bird waste is very acidic and is also very gritty and abrasive so the belts fail due to wear and chemical attack.

> Problem 2

The openings and the hinge engagement is very important so the birds feet don't become stuck in the belt.

> Problem 3

Belt stretch, pin failure and severe sprocket wear are problems with competitors' modular belts.

Solutions

> Solution 1

uni MPB closed top in PEI blue is used to withstand the outdoor temperature range, provide some UV protection and resist chemical attack of the bird waste. Typically SS sliding surfaces are used and softer PEI material embeds with the gritty material and makes a good wear combination.

> Solution 2

uni MPB closed top provides continuous a closed top surface for the birds to walk on without becoming stuck or caught in the belt. The open hinge design creates a gap in between the hinges as the belt pivots around the sprockets, so if a foot does get stuck it is released at the sprocket area.

> Solution 3

Nylon PA6.6 lockpins are used to withstand to the wear of the embedded PEI material and the easy maintenance of the lockpin design makes size adjustment of the belt much easier when necessary. An auger style idler removes debris from under the belt and sprocket wear is greatly reduced by using our standard nylon PA6.6 sprockets.